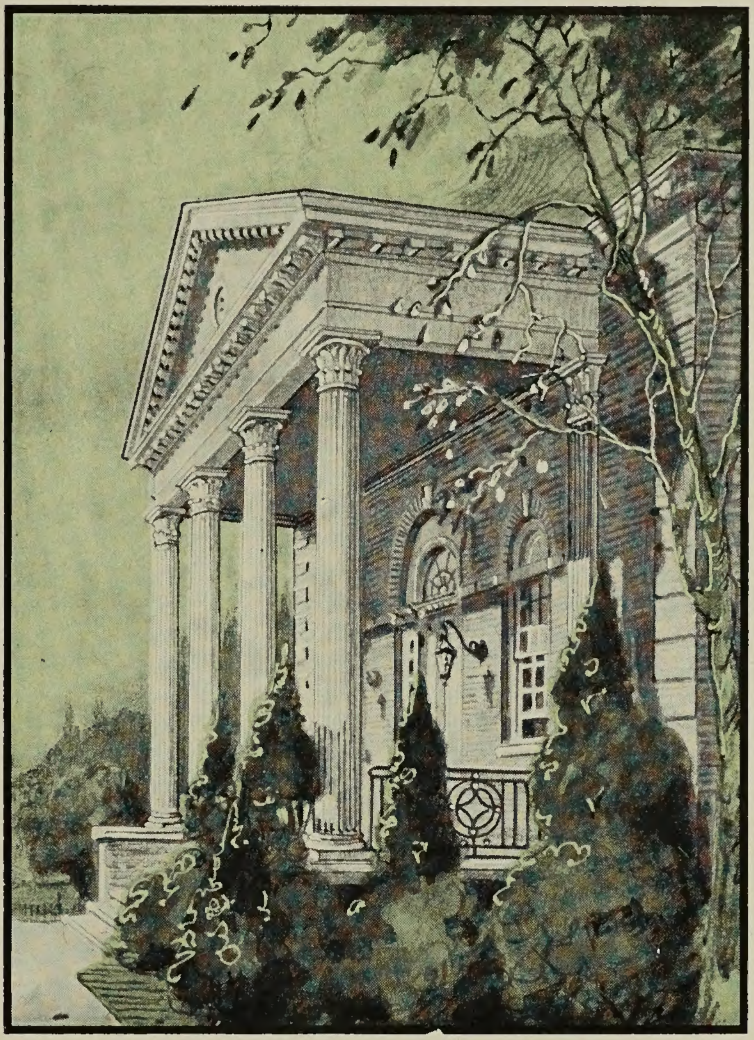
AIA FILE No. 12M—1931

# COLUMNS

THE UNION METAL
MANUFACTURING
· COMPANY ·
CANTON OHIO

AIA FILE No. 12M—1931

# Ancient Beauty for Modern Buildings



The glory of Greek and Roman architecture and the crowning beauty of homes and public buildings in our own Colonial days were made possible by the tasteful and generous use of classical columns.

Today Union Metal furnishes architects, contractors and owners these same handsome designs in enduring pressed steel at very reasonable cost.

CATALOG No. 50-D

## THE UNION METAL MANUFACTURING CO.

GENERAL OFFICES and FACTORY: CANTON, OHIO

—SALES OFFICES—
NEW YORK - CHICAGO - CLEVELAND - DALLAS - SEATTLE
BOSTON - LOS ANGELES - SAN FRANCISCO - ATLANTA

# Ancient Beauty for Modern Buildings

FOR thousands of years the world's most famous architects and designers have found nothing so beautiful and worthy in building as the simple, classical column.

The beauty of these fluted columns has been made available for use on every kind of structure from the modest cottage to large public buildings, by the Union Metal principle of pressed steel column construction.

## Beauty That Lasts a Lifetime

BEAUTIFUL columns on a building are the first feature to catch the eye and the one that is longest remembered. How important, then, that they should be made of enduring material that will not split, rot, and open at the joints and thus mar the entire structure. The beauty of Union Metal Columns is more than skin deep. Under the paint is a permanent metal shaft that will be just as sound and beautiful in ten, twenty—yes, thirty years—as it was the day the columns were put in place.

MANY architects who fully appreciate the architectural value of columns have not used them freely in their work because of the practical difficulties in obtaining columns correct in design, permanent in construction and reasonable in cost. These three limitations are removed by Union Metal Columns—"The Ones That Last a Lifetime."

In using them architects, contractors and owners realize that their work will be protected against the disfiguring effects of time and that the columns, the principal decorative feature of the building, will be as permanent and durable as the brick in the walls.

# Practical Advantages That Commend Union Metal Columns

## To Architects — Contractors — Owners

1 Union Metal Columns are made from enduring, copper-bearing, galvanized steel. They are protected against all conditions of weather and last a lifetime.

2 They are architecturally correct, made in nine styles, conforming to the different orders of Grecian and Roman architecture and in two modified designs. There is a design for the modest cottage or the most elaborate public building.

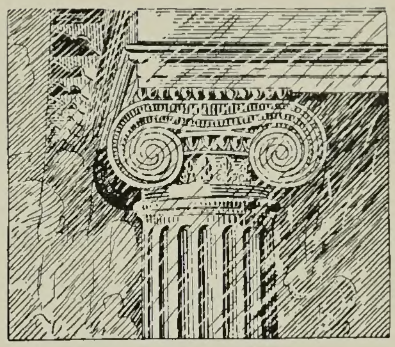
3 They are unquestionably the only type of inexpensive column that should ever be considered, because they will not split, rot, warp or open at joints as all wood columns do.

4 They are absolutely fireproof. They can be shipped and hauled to locations and under conditions where wood columns would rack to pieces and where handling cost of stone would be prohibitive.

5 Ordinary bumps, blows and rough treatment that would dent wood and chip stone columns beyond repair have no effect upon these sturdy pressed steel columns. Union Metal Columns will stand more abuse than other types of columns.

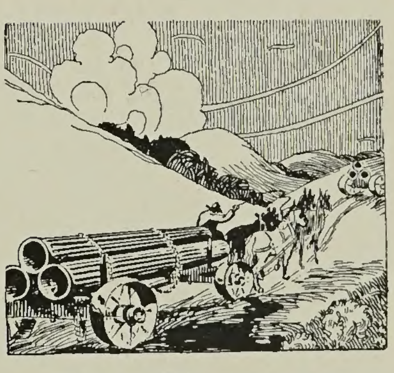
6 Columns with 8-10-12-14 inch diameters are made from one ply 22 gauge copper-bearing galvanized steel.

Columns with 16-18-20-22-24-26-28-30-32-34-36-42 inch diameters are made from two ply, 22 gauge laminated steel construction. Larger than 36 inch columns made in special construction.

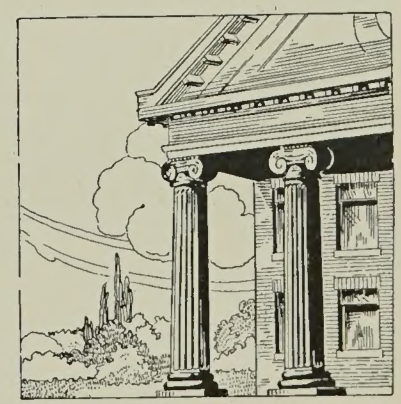


WEATHERPROOF

FIREPROOF



EASILY TRANSPORTED
HANDLED AND ERECTED



GREAT LOAD-BEARING
STRENGTH

# An Investment in Beauty, Strength, Durability, Lifetime Satisfaction

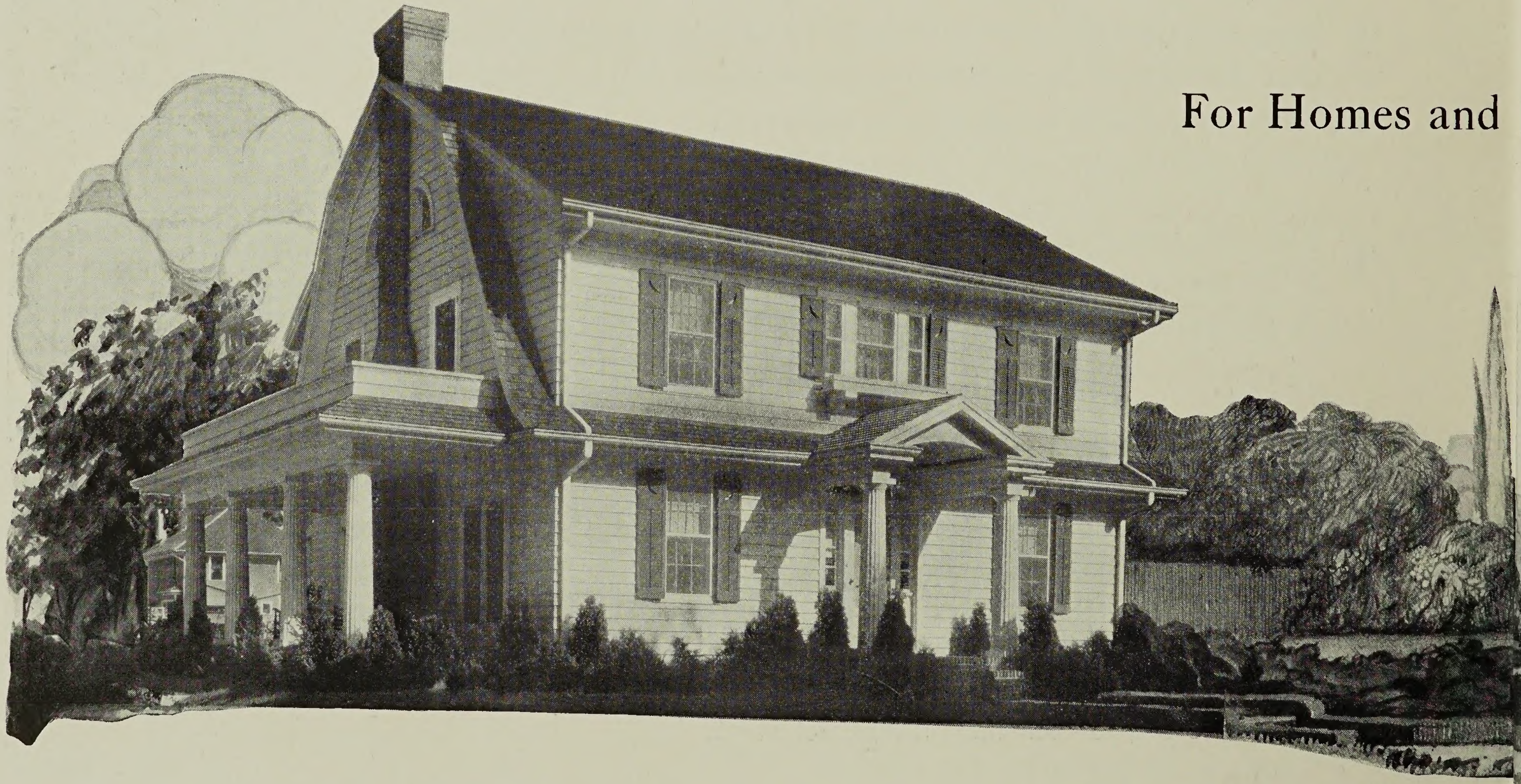
ARCHITECTS, contractors and home owners frequently ask our salesmen and representatives how the cost of Union Metal Pressed Steel Columns compares with wood column prices. It is often difficult to give a definite answer, because prices of wood columns vary with different qualities and forms of construction.

However, in checking many jobs we have found that Union Metal prices range from the same cost as the better grade of wood columns to a slightly higher cost than ordinary mill type columns.

The buyer who tries to save money by substituting cheap columns for Union Metal Columns is simply entering into a future contract for trouble, expense and grief. On account of repairs and replacements he more than pays for metal columns whether he uses them or not.

With Union Metal Columns the first cost is the only cost. Their purchase is not an expense, but an investment in beauty—strength—durability and lifetime satisfaction.

## For Homes and



Residence of Paul G. Fetz, Xenia, Ohio
*Harley W. Owens, Architect*
Six Union Metal Columns, Design 700, Greek Doric, 14 inches diameter, 8 feet high, used on this residence.

# Home - The Safest Investment in the World

AN OWNER considers his home the safest investment in the world, and consequently he wants construction materials that will give him lifetime service.

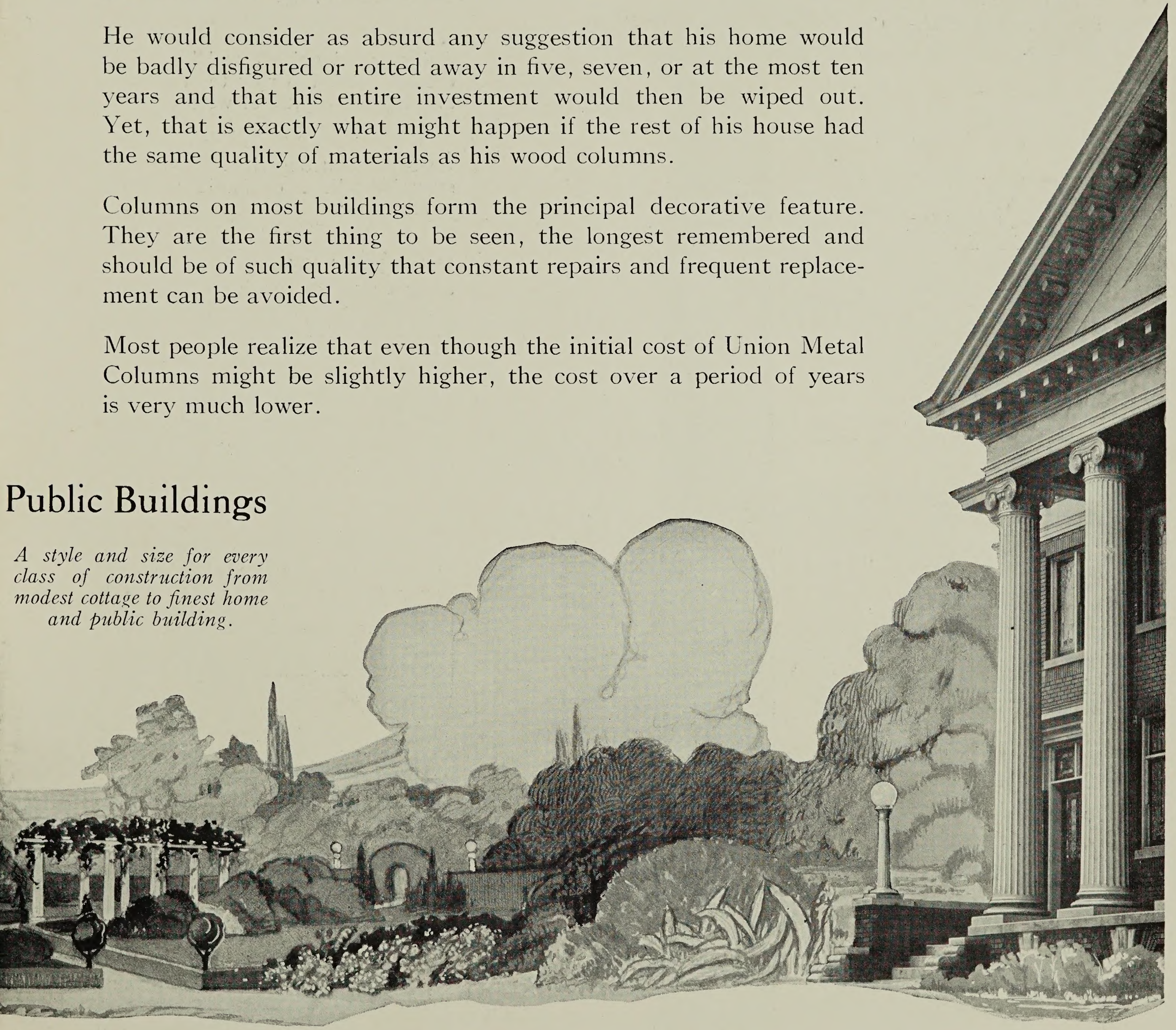
He would consider as absurd any suggestion that his home would be badly disfigured or rotted away in five, seven, or at the most ten years and that his entire investment would then be wiped out. Yet, that is exactly what might happen if the rest of his house had the same quality of materials as his wood columns.

Columns on most buildings form the principal decorative feature. They are the first thing to be seen, the longest remembered and should be of such quality that constant repairs and frequent replacement can be avoided.

Most people realize that even though the initial cost of Union Metal Columns might be slightly higher, the cost over a period of years is very much lower.

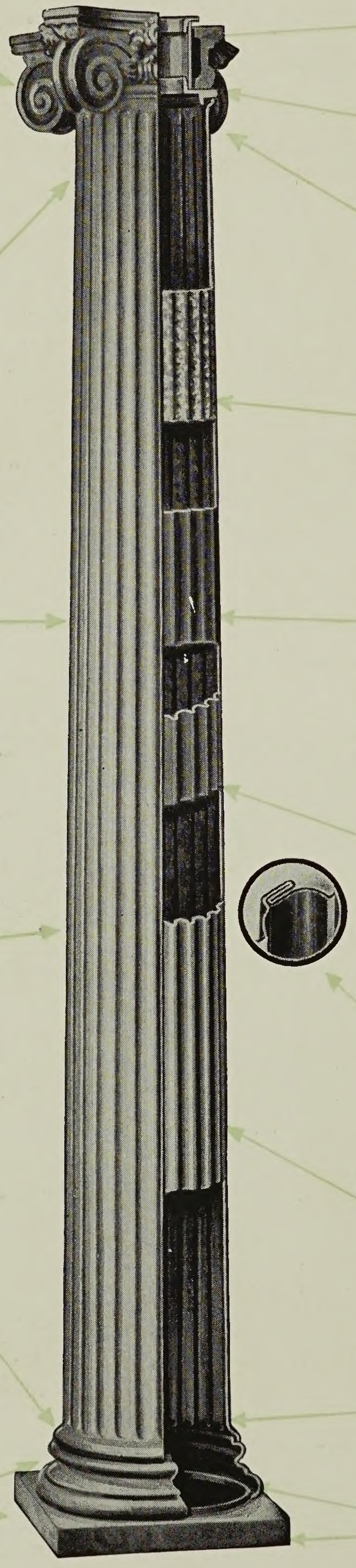
## Public Buildings

*A style and size for every class of construction from modest cottage to finest home and public building.*



LARGE UNION METAL COLUMNS—The principal decorative feature of this Church consists of six Union Metal Columns, Design 230, Greek Ionic, 28 inches diameter, 21 feet high.

# Architectural and Construction Details of Union Metal Columns



Composition Capital with sharp lines and fine architectural detail.

Stopped flutes and apophyge at top of shaft.

Corinthian flute with flat top (sharp Doric flute provided on Doric designs).

Entasis
(Modified taper giving an outcurving or bulging effect).

Stopped flutes and apophyge at bottom of shaft.

Double roll Attic base with bottom square member.

Cast-iron top ring.

A heavy galvanized steel load band extends from top ring to steel shaft and relieves capital of weight.

Cast-iron bottom ring. This construction relieves composition capital of all weight.

Union Metal Columns are protected against weather conditions by being, galvanized with lead and zinc spelter, both inside and outside.

All columns are provided with priming coat of best grade paint before leaving the factory. Any color of finishing coat can be applied after erection.

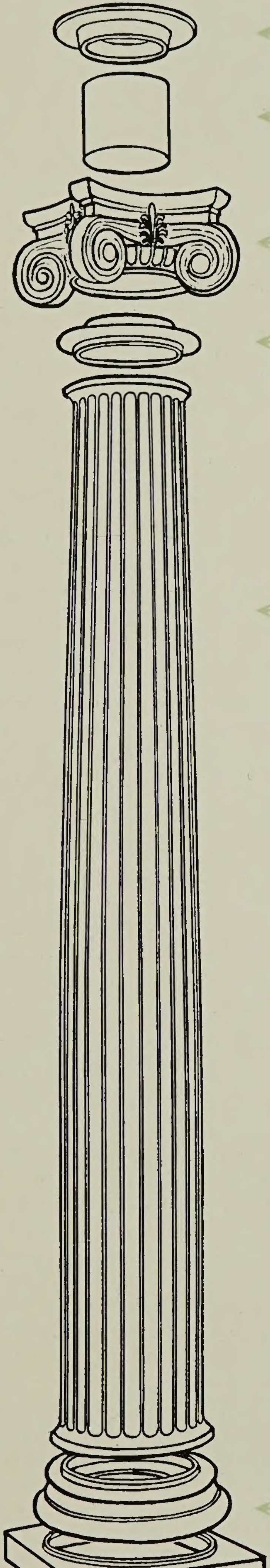
8 inch, 10 inch, 12 inch, 14 inch diameter columns made of one-ply 22-gauge galvanized steel. Large columns, 16 inch to 42 inch diameter, made from two-ply 22-gauge laminated steel construction. Special construction from 42 inch to 60 inch diameter.

Vertical joints of all columns are double lock seamed with seam rolled on inside so that all outside surfaces are smooth and clean.

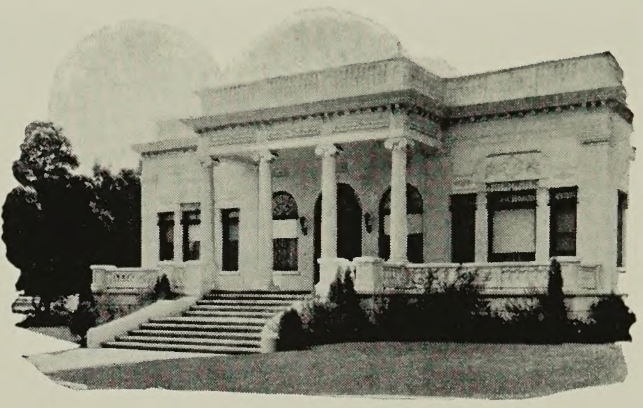
Section of fluting showing beautiful clean-cut lines due to Union Metal steel die construction.

Details of stopped flute outward curvature or apophyge and lower end of shaft where it fits over cast-iron base flange.

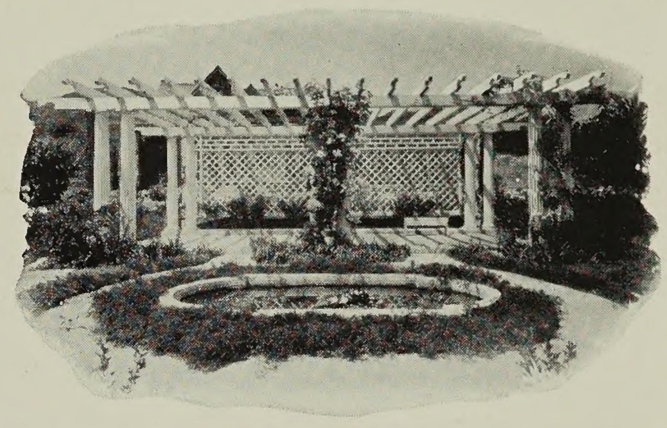
Cast-iron base, smooth and clean.


Cast Iron top ring.
Heavy galvanized steel load band which relieves capital of weight.
Composition capital.
Cast iron ring which carries weight from shaft to load band.
Fluted Steel Shaft.
Cast iron round base.
Cast iron square base.

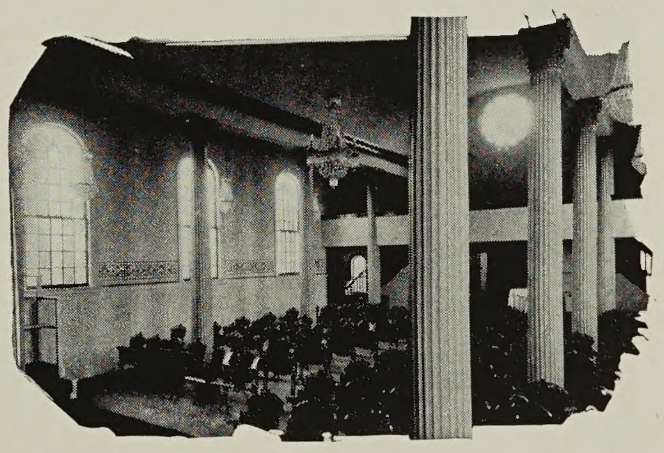
The drawing at left shows the various parts of a typical Union Metal Column with composition capital in their relative positions before assembly. This construction is typical of Column Designs No. 212, 230, 237, 222, 213, 219 and 224.



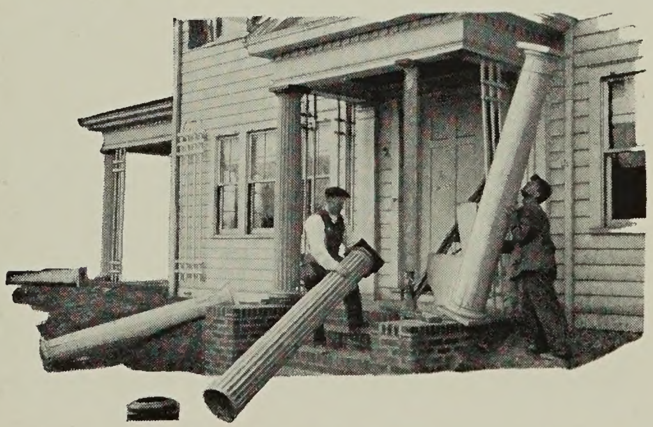
True beauty in architecture may be obtained through the use of correctly designed columns. The McConnell Residence, Beverly Hills, California. *H. M. Banfield, Architect.*



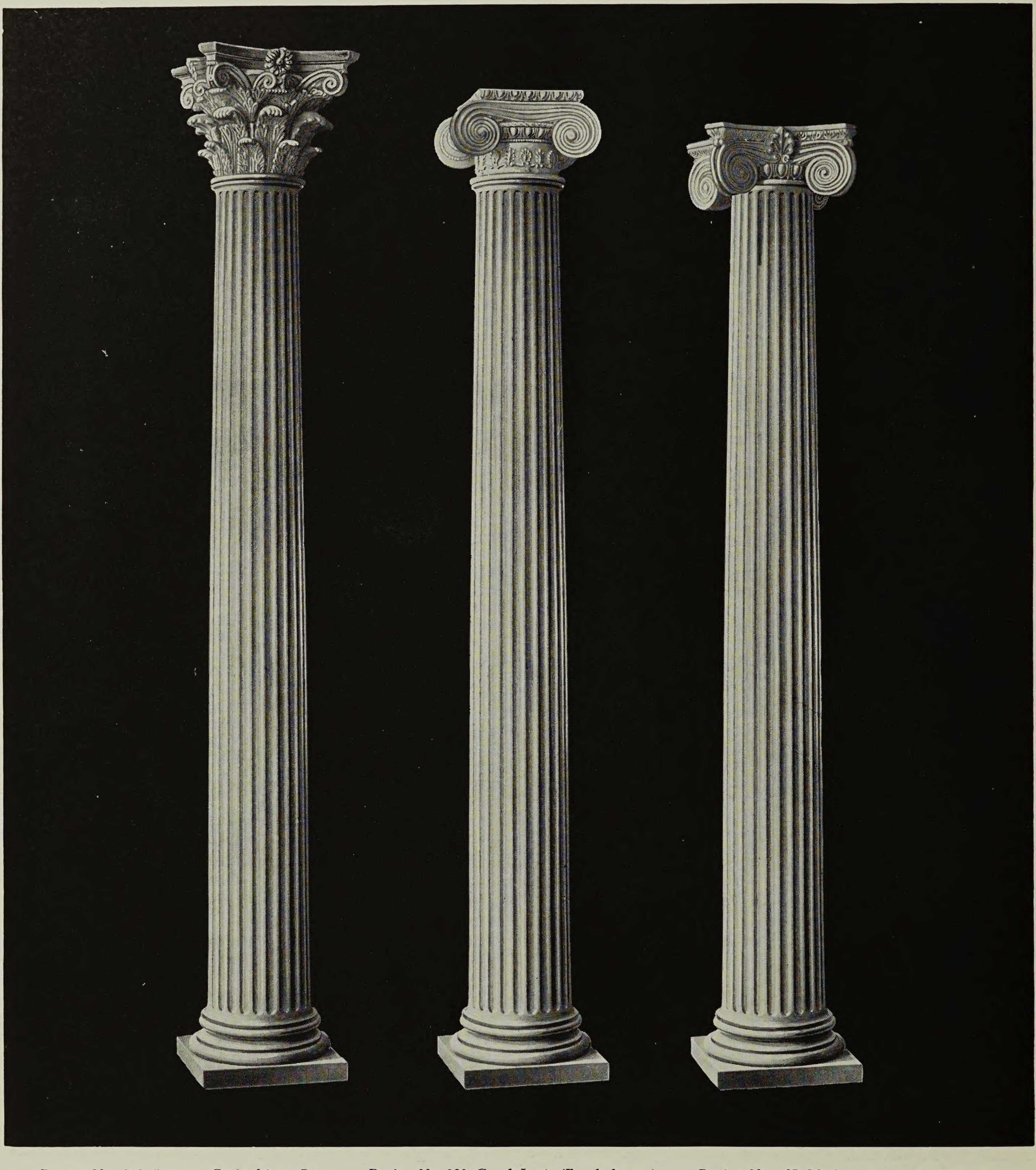
Pergola in Los Angeles, Calif., showing dignified application of Union Metal Columns.



Union Metal Columns lend beauty and dignity to the interior as well as the exterior of all types of buildings.



Actual photographs showing replacement of split wood columns with Union Metal Columns on a Cleveland, Ohio, residence. This replacement was made after the house had been built only three years.



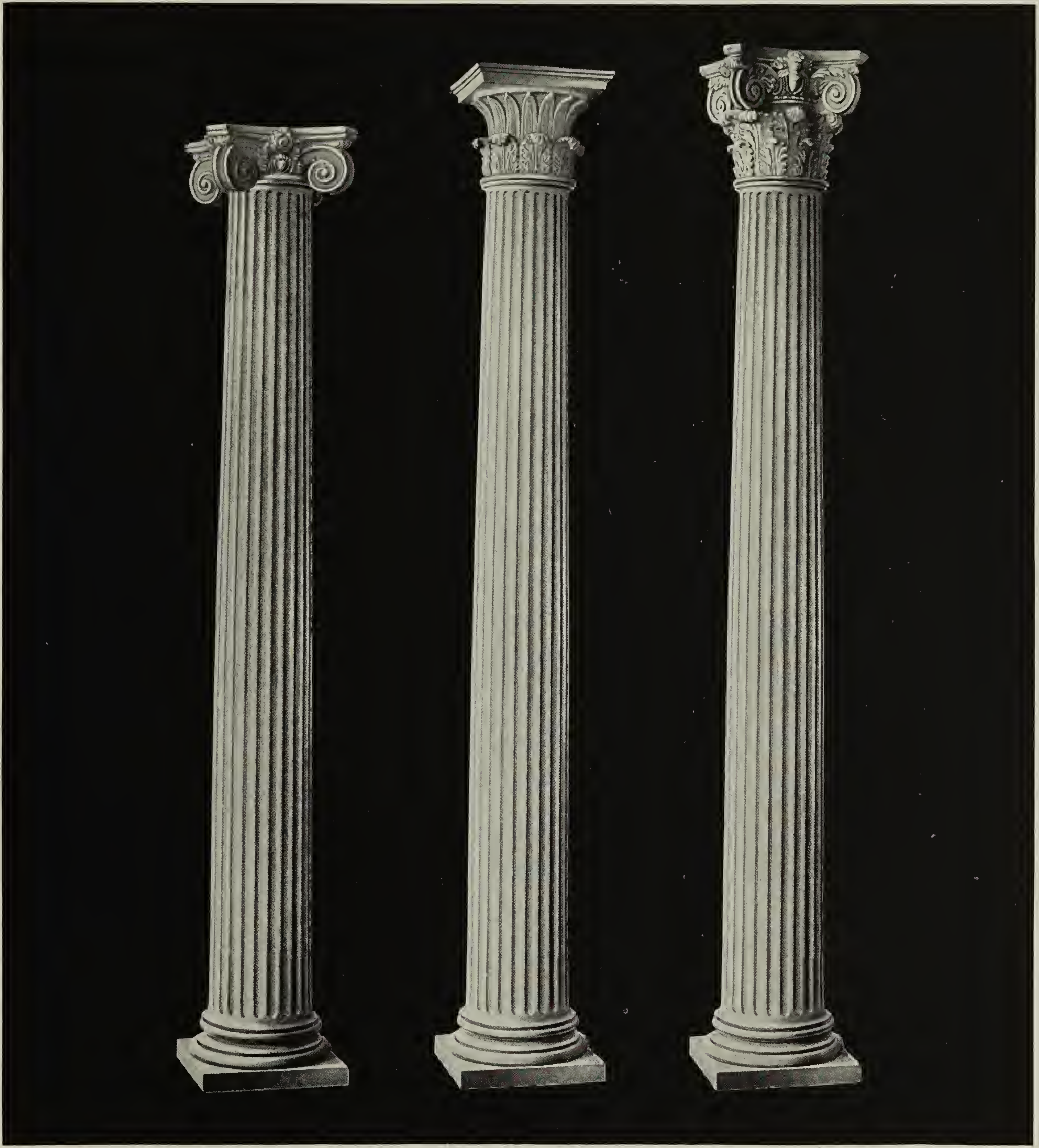
**Design No. 212, Roman Corinthian,** Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

**Design No. 230, Greek Ionic (Erechtheum).** Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

**Design No. 237, Modern Ionic.** Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

*Dimension Specifications given on Pages* 14 *and* 15

Union Metal Columns (except Designs 240 and 260) are made in all sizes from 8 inch to 42 inch diameters and from 5 feet to 35 feet high. Columns with diameter greater than 42 inches and higher than 35 feet are made in special construction



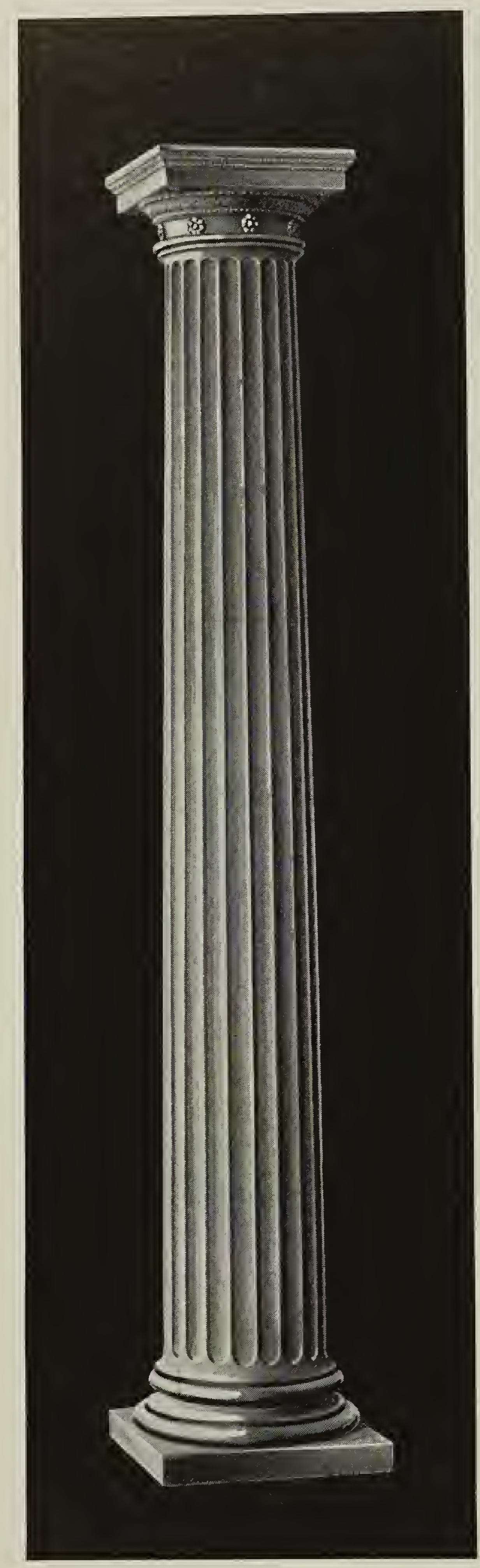
**Design No. 222, Italian Renaissance Ionic** (Scamozzi). Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

**Design No. 213, Temple of the Winds.** Corinthian Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

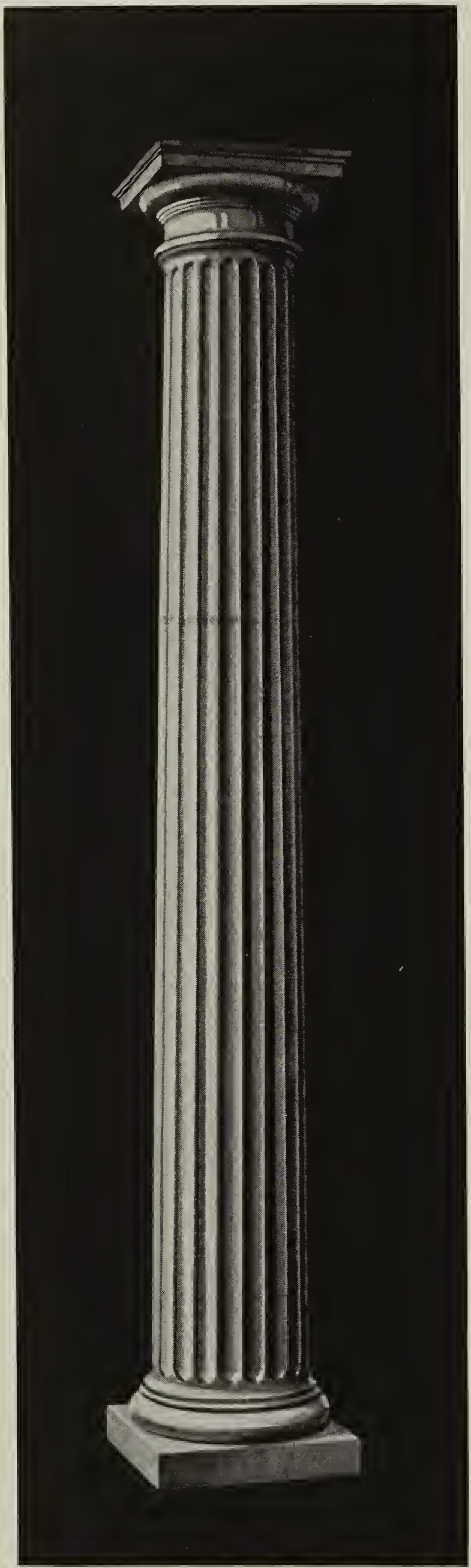
**Design No. 219, Italian Composite.** Composition Capital, Attic Base (Cast Iron). Steel Shaft (Cor. Flute).

*Dimension Specifications given on Pages* 14 *and* 15

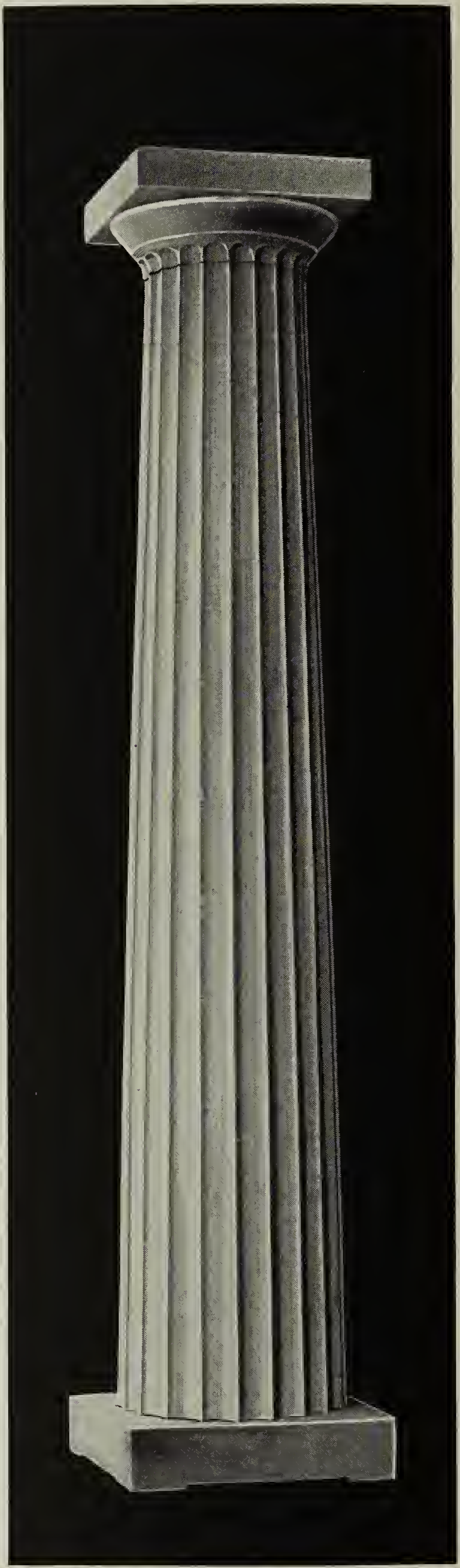
Union Metal Columns (except Designs 240 and 260) are made in all sizes from 8 inch to 42 inch diameters and from 5 feet to 35 feet high. Columns with diameters greater than 42 inches and higher than 35 feet are made in special construction.



**Design No. 224, Roman Doric (Diocletian)** Composition Capital, Attic Base (Cast Iron), Steel Shaft (Doric Flute).



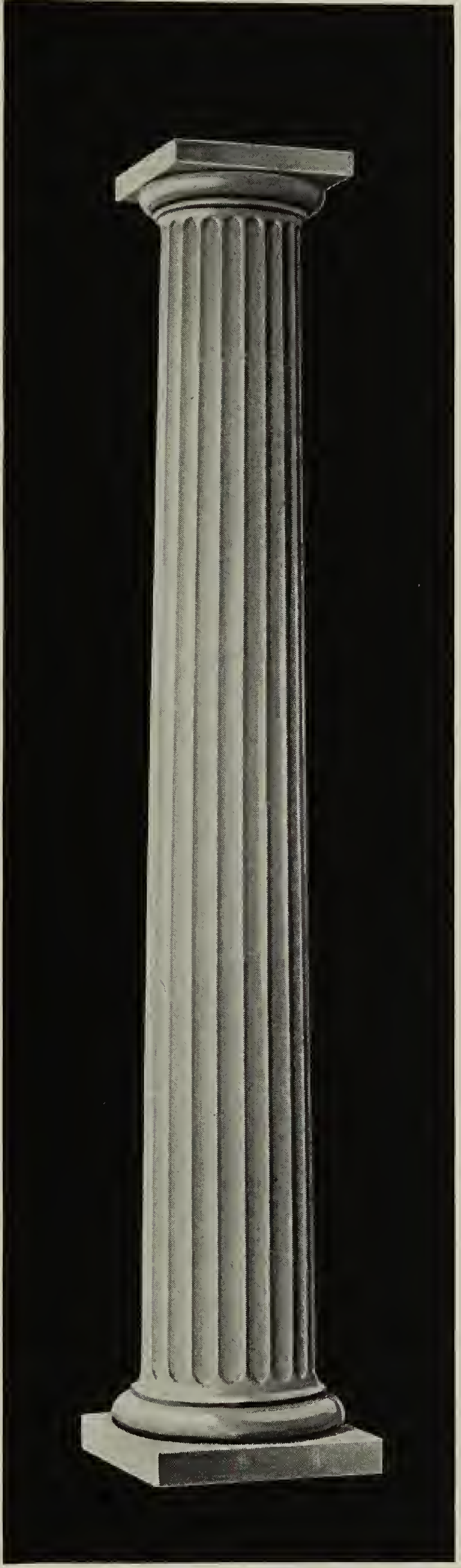
**Design No. 246, True Roman Doric.** Cast Iron Capital, and Cast Iron Base. Steel Shaft (Doric Flute).



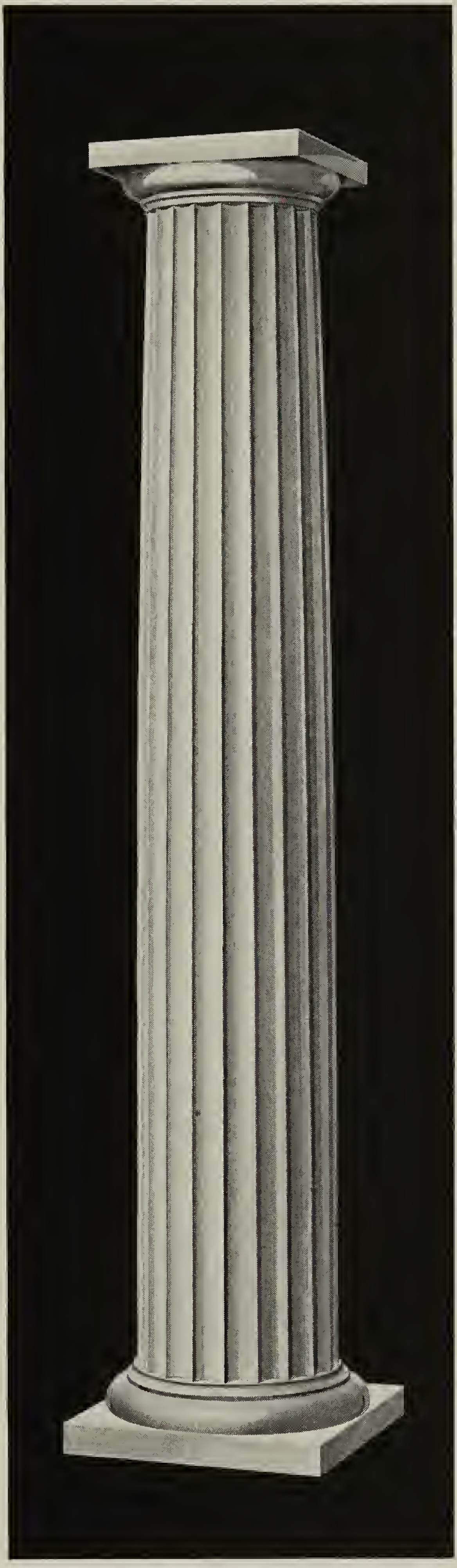
**Design No. 700, Greek Doric.** Capital including Top Square (Cast Iron). Square Base Member (Cast Iron). Steel Shaft (Doric Flute).

*Dimension Specifications given on Pages* 14 *and* 15

Union Metal Columns (except Designs 240 and 260) are made in all sizes from 8 inch to 42 inch diameters and from 5 feet to 35 feet high. Columns with diameter greater than 42 inches and higher than 35 feet are made in special construction.



**Design No. 240, Modern, Steel Doric.** (Doric Flute). Design 240 furnished at very reasonable prices in stock sizes only:—8-10-12-14 inch diameters and heights of 5 feet to 14 ft. 6″ overall in fractional parts of an inch.



**Design No. 260,** An inexpensive column furnished in stock sizes only. Heights 6′ to 10′, diameters 6½″, 8″, 10″ and 12″. Can be adjusted to height on job.

# Designs No. 240 and 260

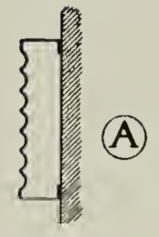
IN COLUMN No. 240, the complete capital and roll member of base are made of No. 16 gauge steel, while the fluted shaft is made of No. 22 gauge steel. The square base member is cast iron.

Design No. 260 is composed of a fluted steel shaft, and cast iron base and capital. This column is furnished only in stock sizes, but as much as 12 inches can be cut off the bottom of the fluted steel shaft by the contractor to make the column the exact height required. Although these two designs do not conform strictly to the classical orders, they are extremely popular due to their simplicity and low price.

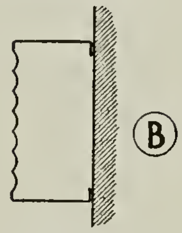
# Pilasters and Odd Shapes

FLAT pilasters, corner pilasters, half round columns and three-quarter round columns are made in sizes to match the different designs in this catalog.

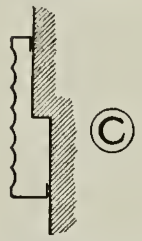
In ordering pilasters specify: whether pilaster face shall be tapered to match columns, or whether pilaster face shall be straight from top to bottom. If ordered straight an extra cost applies. Always specify returns of pilasters in inches.



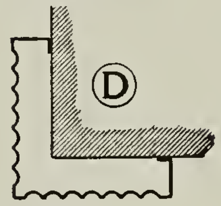
PILASTER QUARTER RETURN



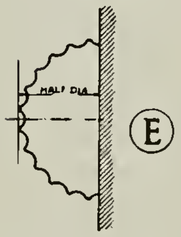
PILASTER HALF RETURN



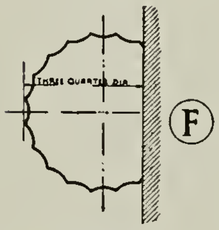
PILASTER UNEQUAL RETURNS



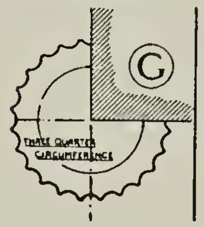
CORNER PILASTER QUARTER RETURNS



HALF COLUMN



THREE QUARTER COLUMN



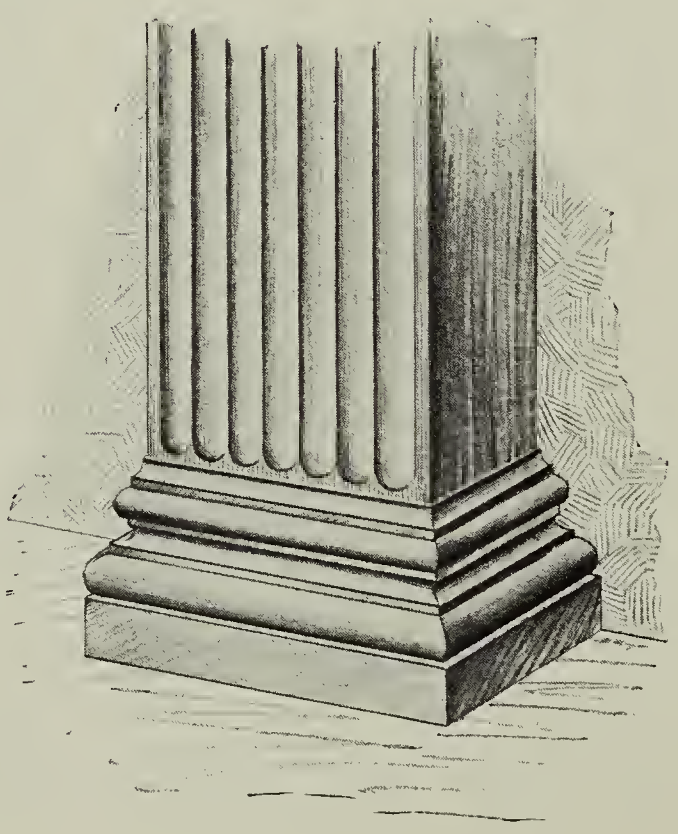
THREE QUARTER CORNER COLUMN

## Notes

1. Unless otherwise ordered the bottom and top faces of pilasters will be furnished the same as the bottom and top diameters of columns, in which case the pilaster bases and capitals will line up with column bases and capitals.

2. All Union Metal Pilasters are fluted on the front faces to match columns, but are not fluted on the returns or projections unless specifically ordered. Fluted returns (projections) entail extra cost.

3. Returns when less than quarter are not tapered; when quarter or greater they are tapered.



Detail of bottom of Pilaster showing stopped flute and the fitting to cast iron base.

# Union Metal Columns Have Great Load Bearing Strength

UNION Metals Columns are the strongest architectural columns manufactured. The principle of their construction—the fluted steel cylinder, is in accordance with the best engineering practice and insures great compression strength.

Their service and strength are best exemplified by the fact that of the many thousands in service, not one has ever failed or had to be replaced for any cause whatever.

The results of recent tests on Union Metal Columns by the prominent testing engineers—Robert W. Hunt and Co., show that Union Metal Columns are strong enough for normal loads that they are called upon to bear. When an abnormally heavy pediment or weight is to be supported, they may be reinforced by steel I or H structural beam passing up through them, or if desired, heavy pipe could be used inside the column.

## Load Bearing Formulae

(*Result of tests made by Robt. W. Hunt & Co.*)

**Design Nos. 240, 246, 212, 213, 219, 224, 230, 237 and 222.**

1 ply 22 gauge shaft

460 x top diameter in inches equals pounds dead load.

2 ply 22 gauge shaft.

860 x top diameter in inches equals pounds dead load.

Example: 12″ dia. column tapering to 10″ top dia. 1 ply shaft: 460 x 10 = 4600 lbs. dead load. 2 ply shaft: 860 x 10 = 8600 lbs. dead load.

Note: When designs using composition caps are ordered and are expected to carry an unusually heavy weight, this should be explained to us so that a heavier core band than ordinarily furnished will be supplied for inside the cap.

**Design No. 700 and No. 260**

1 ply 22 gauge shaft.

1250 x top diameter in inches equals pounds dead load.

2 ply 22 gauge shaft.

2000 x top diameter in inches equals pounds dead load.

Example: No. 700 column, 12″ tapering to 9″ top dia.

1 ply shaft: 1250 x 9 = 11,250 lbs. dead load.

2 ply shaft: 2000 x 9 = 18,000 lbs. dead load.

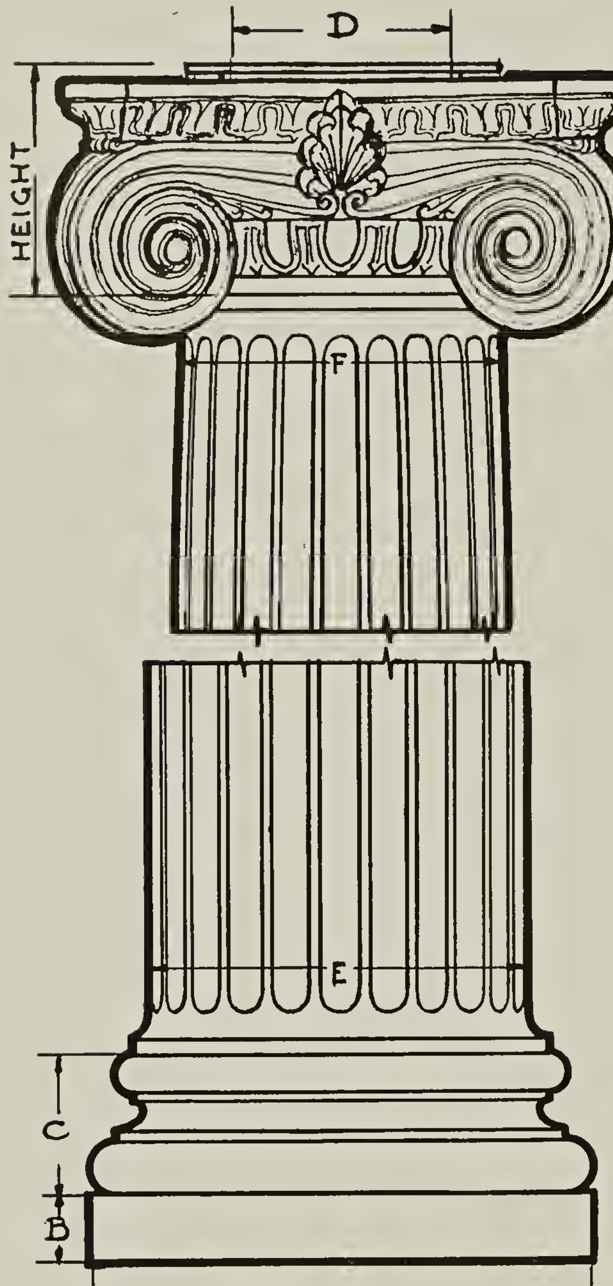
No. 260 column, 12″ tapering to 10″ top dia.

1 ply shaft: 1250x10 = 12,500 lbs. dead load.

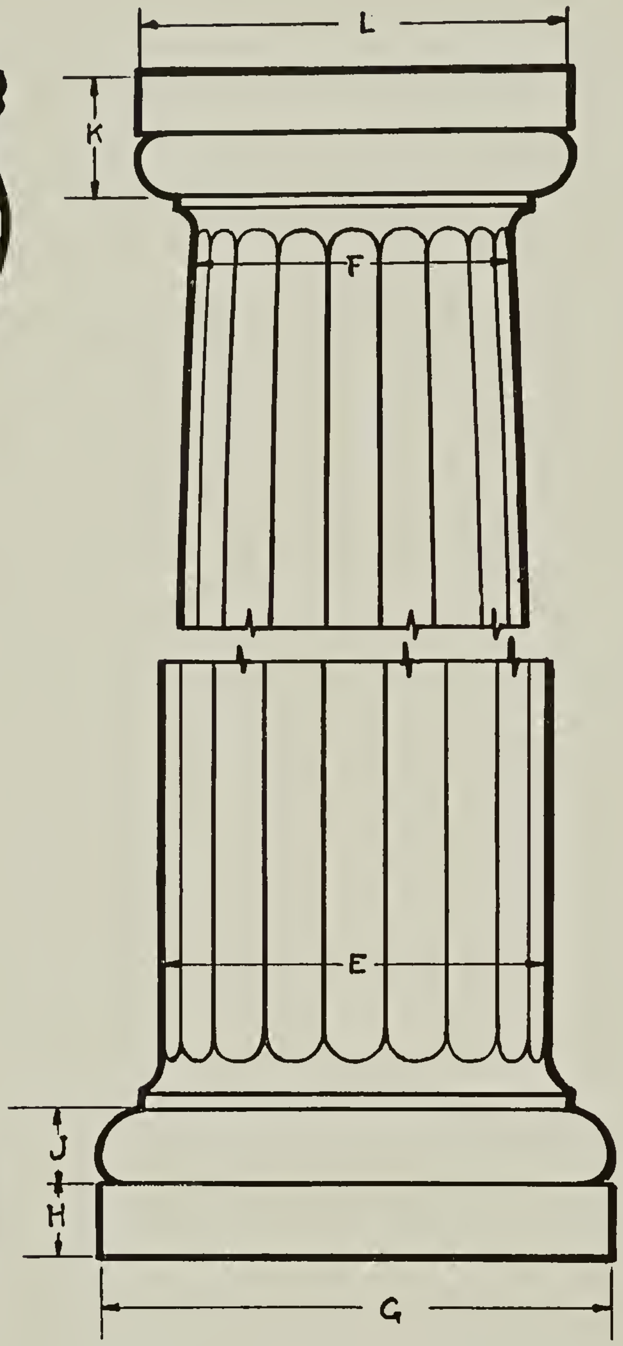
2 ply shaft: 2000x10 = 20,000 lbs. dead load.

A safety factor of 2 is recommended.

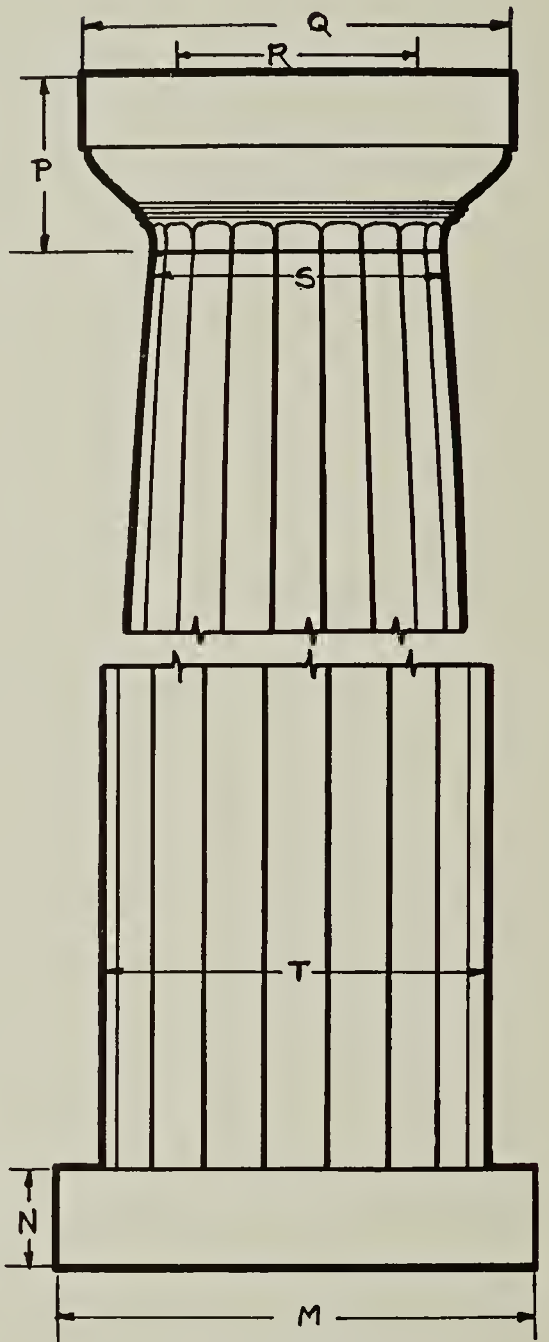
Standard practice is to furnish columns up to and including 14″ diameter with 1 ply shaft, but when desired, 2 ply can be furnished at an increase in price. All columns larger than 14″ diameter are furnished 2 ply, 22 gauge shaft.



Drawing of all designs using Composition Capitals: 212-230-237-222-213-219 with Corinthian flutes and 224 with Doric flutes.



Drawing of Design 240. Modern all-steel Doric.
This column is similar to Roman Doric Design No. 246 shown on page 10 and dimensions of which are given on chart below.

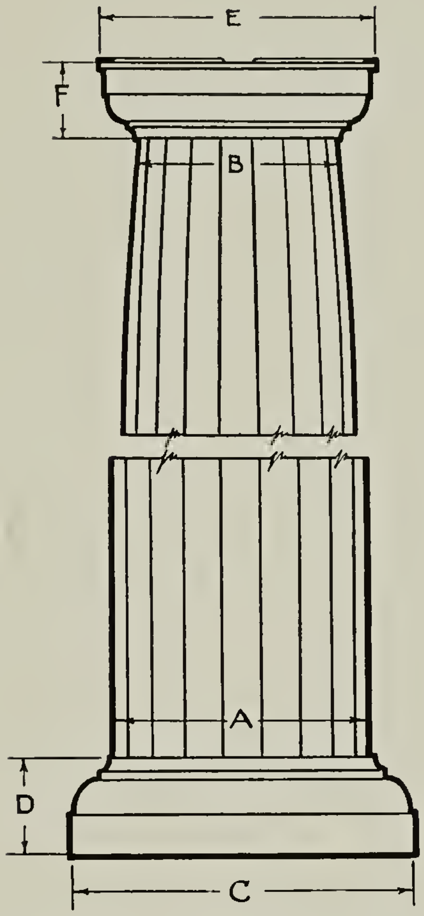


Drawing of Design 700
Greek Doric.

# Dimension Chart for Union Metal Columns

| Bott. dia. shaft | Designs No. 212, 230, 237, 222, 213, 219 and 224 | | | | | | | | | | | | | Design No. 240 | | | | | Design No. 246 | | | | | | Design No. 700 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | Height of Capital | | | | | | | G | H | J | K | L | G | H | J | K | L | R | M | N | P | Q | R | S | T |
| | | | | | | | 212 | 230 | 237 | 222 | 213 | 219 | 224 | | | | | | | | | | | | | | | | | | |
| 8 | 10 5/8 | 1 5/16 | 3 | 5 1/8 | 8 | 6 1/2 | 9 7/8 | 6 1/8 | 4 1/8 | 4 1/8 | 8 7/8 | 11 1/8 | 4 1/8 | 11 | 1 9/16 | 1 1/2 | 2 1/2 | 8 5/8 | 10 9/16 | 1 15/16 | 1 15/16 | 4 3/8 | 9 3/4 | 5 | .... | .... | .... | .... | .... | .... | .... |
| 10 | 13 15/16 | 1 11/16 | 3 3/8 | 6 1/4 | 9 3/4 | 8 | 13 1/16 | 9 1/16 | 6 7/16 | 5 5/16 | 12 13/16 | 13 1/16 | 6 1/16 | 13 1/4 | 1 15/16 | 1 7/8 | 3 3/16 | 11 | 13 1/4 | 2 7/16 | 2 7/16 | 5 7/16 | 12 | 6 1/4 | 12 1/4 | 2 1/2 | 4 5/8 | 10 7/8 | 5 1/4 | 7 1/2 | 10 |
| 12 | 16 | 1 15/16 | 4 5/16 | 7 7/8 | 12 | 10 | 15 1/8 | 11 1/8 | 6 7/8 | 5 5/8 | 15 5/8 | 15 3/8 | 7 5/8 | 16 | 2 5/16 | 2 1/4 | 3 13/16 | 13 1/4 | 15 7/8 | 2 7/8 | 2 15/16 | 6 11/16 | 14 7/8 | 8 | 14 3/8 | 3 | 5 5/16 | 13 | 6 1/2 | 9 | 12 |
| 14 | 18 5/8 | 2 5/16 | 4 3/4 | 9 3/8 | 14 | 12 | 16 3/4 | 13 1/4 | 7 3/4 | 6 3/4 | 16 1/4 | 19 1/4 | 8 3/4 | 18 5/8 | 2 3/4 | 2 3/4 | 4 9/16 | 16 | 18 1/2 | 3 3/8 | 3 3/8 | 8 | 18 | 9 1/2 | 16 5/8 | 3 3/8 | 6 1/2 | 15 1/2 | 7 1/4 | 11 | 14 |
| 16 | 20 5/8 | 2 9/16 | 5 5/16 | 9 3/8 | 15 3/4 | 12 | 16 3/4 | 13 1/4 | 7 3/4 | 6 3/4 | 16 1/4 | 19 1/4 | 8 3/4 | .... | .... | .... | .... | .... | 20 13/16 | 3 3/4 | 3 3/4 | 8 | 18 | 9 1/2 | 18 7/8 | 3 7/8 | 7 1/16 | 16 3/4 | 7 7/8 | 12 | 16 |
| 16 | 20 5/8 | 2 9/16 | 5 5/16 | 10 | 15 3/4 | 14 | 18 1/2 | 15 3/4 | 10 | 8 | 21 1/4 | 22 1/2 | 11 3/4 | .... | .... | .... | .... | .... | 20 13/16 | 3 3/4 | 3 3/4 | 9 3/8 | 21 | 10 | .... | .... | .... | .... | .... | .... | .... |
| 18 | 22 15/16 | 2 13/16 | 5 13/16 | 10 | 17 3/8 | 14 | 18 1/2 | 15 3/4 | 10 | 8 | 21 1/4 | 22 1/2 | 11 3/4 | .... | .... | .... | .... | .... | 22 7/8 | 4 3/16 | 4 1/8 | 9 3/8 | 21 | 10 | 20 1/8 | 4 1/4 | 8 1/16 | 19 1/4 | 8 3/4 | 14 | 18 |
| 20 | 25 7/8 | 3 3/16 | 6 9/16 | 12 1/2 | 19 1/2 | 15 3/4 | 24 15/16 | 17 7/16 | 11 3/16 | 8 15/16 | 20 1/16 | 24 3/16 | 11 15/16 | .... | .... | .... | .... | .... | 25 3/4 | 4 11/16 | 4 11/16 | 10 3/8 | 23 5/8 | 12 1/2 | 23 3/8 | 4 3/4 | 8 9/16 | 20 1/2 | 9 1/4 | 15 | 20 |
| 20 | 25 7/8 | 3 3/16 | 6 9/16 | 14 | 19 1/2 | 17 3/8 | 26 11/16 | 17 7/16 | 12 3/16 | 9 15/16 | 26 9/16 | 27 7/16 | 13 7/16 | .... | .... | .... | .... | .... | 25 3/4 | 4 11/16 | 4 11/16 | 11 1/4 | 26 | 14 | .... | .... | .... | .... | .... | .... | .... |
| 22 | 28 3/4 | 3 3/4 | 5 7/8 | 14 | 22 | 17 3/8 | 26 11/16 | 17 7/16 | 12 3/16 | 9 15/16 | 26 9/16 | 27 7/16 | 13 7/16 | .... | .... | .... | .... | .... | 29 | 5 1/4 | 5 5/16 | 11 1/4 | 26 | 14 | 25 7/16 | 5 | 9 1/4 | 24 | 9 3/4 | 17 3/8 | 22 |
| 24 | 32 | 4 | 6 3/4 | 15 1/2 | 23 1/2 | 19 1/2 | 29 11/16 | 20 11/16 | 12 7/16 | 10 15/16 | 25 15/16 | 29 11/16 | 15 3/16 | .... | .... | .... | .... | .... | 31 | 5 5/8 | 5 11/16 | 12 3/4 | 29 1/4 | 15 | 27 1/2 | 5 1/2 | 10 3/16 | 24 3/8 | 10 | 18 | 24 |
| 26 | 34 1/2 | 4 5/8 | 7 7/16 | 15 1/2 | 25 | 19 1/2 | 29 11/16 | 20 11/16 | 12 7/16 | 10 15/16 | 25 15/16 | 29 11/16 | 15 3/16 | .... | .... | .... | .... | .... | 33 | 6 | 6 | 12 3/4 | 29 1/4 | 15 | 30 | 6 | 12 | 28 5/8 | 13 1/2 | 20 | 26 |
| 26 | 34 1/2 | 4 5/8 | 7 7/16 | 17 | 25 | 22 | 32 9/16 | 21 13/16 | 12 9/16 | 12 1/16 | 32 13/16 | 32 9/16 | 16 13/16 | .... | .... | .... | .... | .... | 33 | 6 | 6 | 14 9/16 | 33 | 15 13/16 | .... | .... | .... | .... | .... | .... | .... |
| 28 | 37 | 5 1/8 | 8 7/16 | 17 | 26 7/8 | 22 | 32 9/16 | 21 13/16 | 12 9/16 | 12 1/16 | 32 13/16 | 32 9/16 | 16 13/16 | .... | .... | .... | .... | .... | 35 1/2 | 6 7/16 | 6 1/2 | 14 9/16 | 33 | 15 13/16 | 32 | 6 3/8 | 13 1/4 | 31 3/4 | 15 | 22 | 28 |
| 30 | 39 | 5 1/2 | 9 7/16 | 18 3/4 | 29 1/4 | 23 1/2 | 35 7/16 | 23 7/16 | 12 11/16 | 13 3/16 | 35 7/16 | 35 7/16 | 17 15/16 | .... | .... | .... | .... | .... | 38 1/2 | 7 | 7 | 15 3/8 | 35 1/4 | 18 | 34 1/2 | 6 7/8 | 14 1/2 | 34 3/4 | 16 | 24 | 30 |
| 32 | 41 1/2 | 6 | 10 7/8 | 20 1/4 | 31 7/8 | 25 | 39 11/16 | 24 15/16 | 13 3/16 | 14 3/16 | 34 7/16 | 36 15/16 | 18 7/16 | .... | .... | .... | .... | .... | 42 1/2 | 7 11/16 | 7 11/16 | 16 1/4 | 37 1/2 | 19 1/2 | 36 3/4 | 7 3/8 | 14 1/2 | 34 3/4 | 16 | 24 | 32 |
| 34 | 43 | 6 1/8 | 10 1/4 | 22 | 34 | 26 7/8 | 42 | 26 | 16 | 15 | 36 | 40 | .... | .... | .... | .... | .... | .... | 44 1/2 | 8 3/16 | 8 1/8 | 17 1/2 | 40 3/8 | 22 | 39 | 7 3/4 | 16 1/2 | 43 | 18 | 28 | 34 |
| 36 | 45 1/2 | 6 1/2 | 11 1/4 | 23 1/4 | 36 | 29 1/4 | 42 1/8 | 28 1/8 | 18 1/8 | 16 1/8 | 40 3/16 | 42 1/8 | .... | .... | .... | .... | .... | .... | 47 1/2 | 8 5/8 | 8 11/16 | 19 1/16 | 43 3/4 | 23 | 41 1/2 | 8 1/4 | 16 1/2 | 43 | 18 | 28 | 36 |
| 42 | 56 | 7 | 14 | 27 | 42 | 34 | .... | .... | 19 1/4 | .... | 44 7/16 | .... | .... | .... | .... | .... | .... | .... | 55 3/8 | 10 | 10 1/16 | .... | .... | .... | .... | .... | .... | .... | .... | .... | .... |

D and R dimensions represent opening through capital.



Drawing of Design No. 260.

## Dimension Chart for Design No. 260

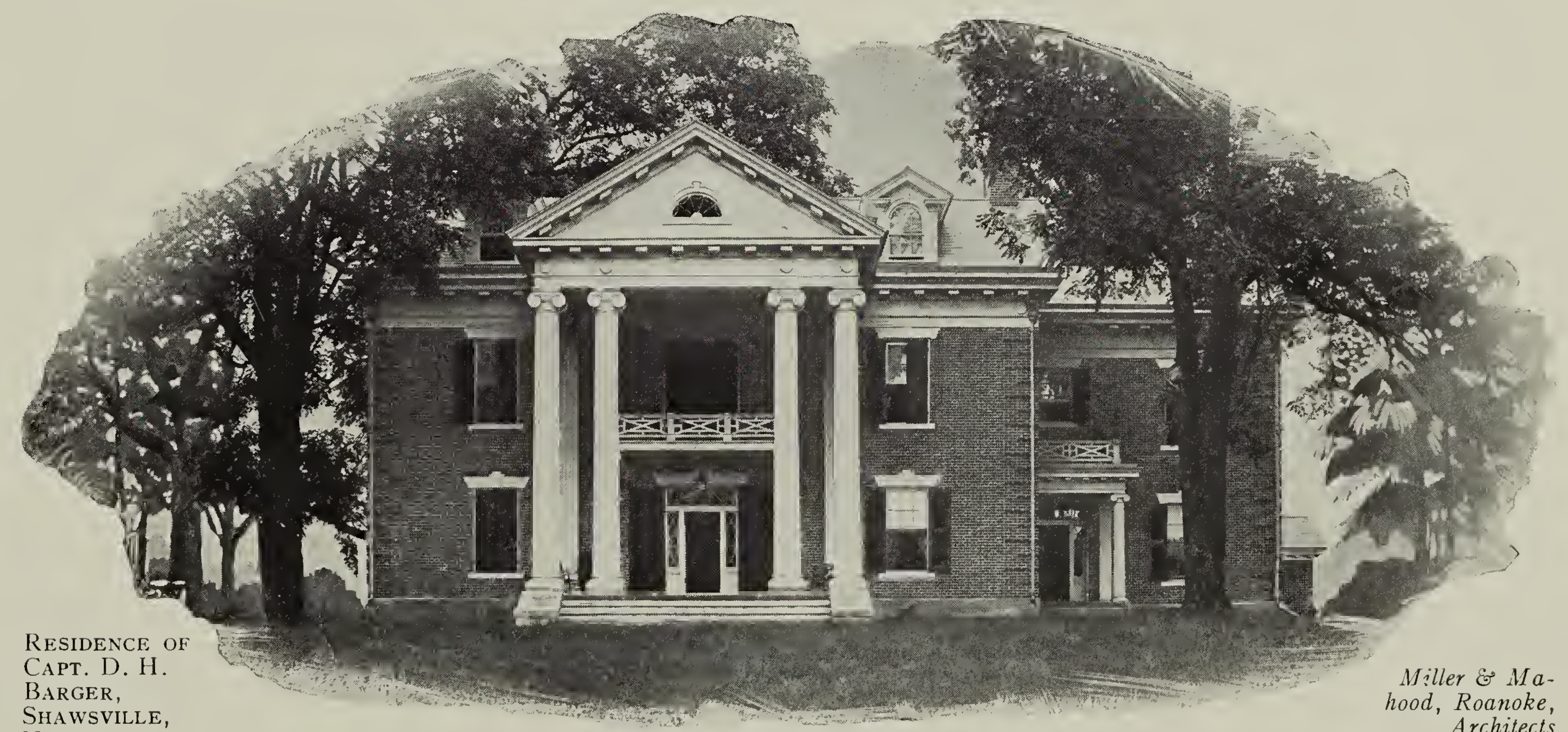
| Bottom Diam. Shaft | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 6½″ | 6½ | 5 | 8⅝ | $2\frac{7}{16}$ | 6⅝ | 1⅞ |
| 8″ | 8 | 6½ | $10\frac{9}{16}$ | 3 | 8⅝ | $2\frac{7}{16}$ |
| 10″ | 10 | 8 | 13¼ | 3¾ | $10\frac{9}{16}$ | 3 |
| 12″ | 12 | 10 | 15⅞ | 4½ | 13¼ | 3¾ |

For further information on Column Design No. 260 see page 13.

## Architects' Specification Covering Union Metal Columns

"THE fluted columns used in this building shall be Union Metal Pressed Steel Columns with entasis and stopped flutes, manufactured by The Union Metal Manufacturing Company, Canton, Ohio. The design number, style and size of columns to be used are indicated on drawings. The manufacturer shall apply a priming coat of high grade metallastic paint to all columns before shipment from his plant."

## In Service Since 1907



Residence of
Capt. D. H.
Barger,
Shawsville,
Virginia.

*Miller & Mahood, Roanoke, Architects*

UNION Metal Columns on the beautiful residence of Captain D. H. Barger at Shawsville, Virginia, have given satisfactory service since 1907. This was the first job of Union Metal Columns to be specified by an architect, and the first order shipped from our plant.

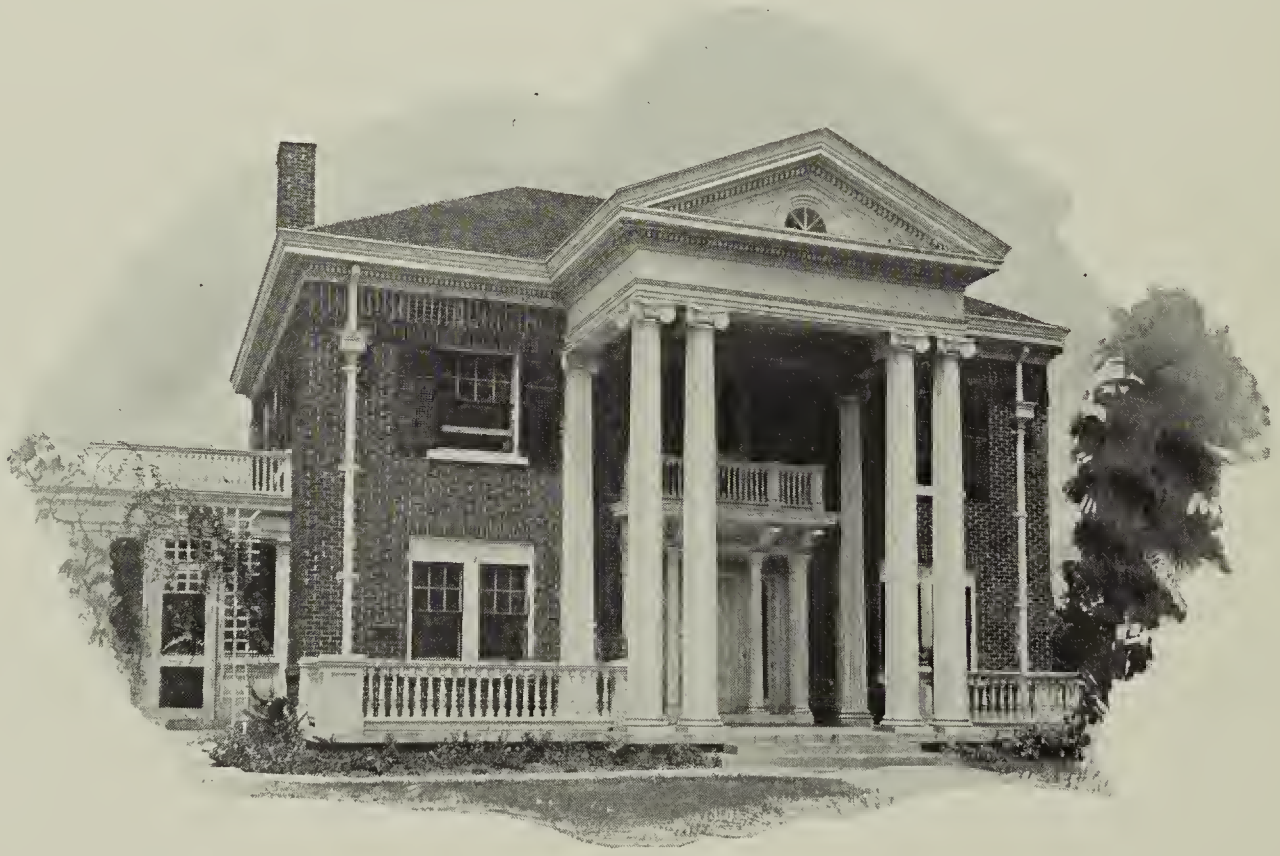
# Architects and Owners Want the Best Columns Obtainable

WHEN Doctor Berry and his architects discussed the plans and specifications for this house, they decided that the columns should be permanent as well as beautiful.

That decision led them to specify Union Metal Pressed Steel Columns and Pilasters so that the principal decorative feature of the house might be as permanent and durable as the brick in the walls.

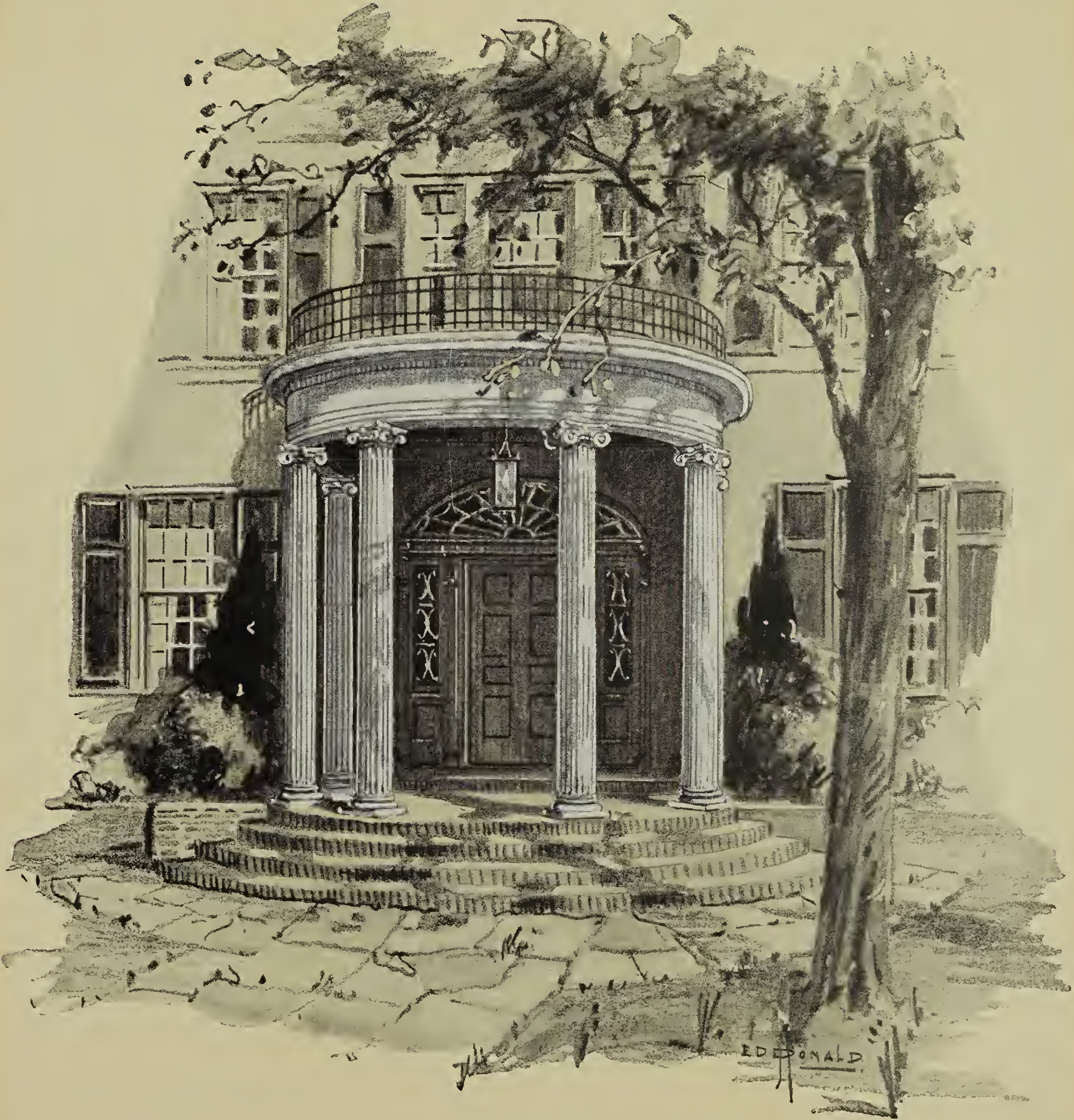
At moderate cost they have given to this home the beauty that comes from the tasteful use of Union Metal Columns. That beauty is permanent for it cannot be destroyed by splitting, rotting or opening at joints which sooner or later mar all wood columns.

This is typical of the service that Union Metal Columns are rendering on thousands of structures throughout the country from modest cottages to larger homes and public buildings.

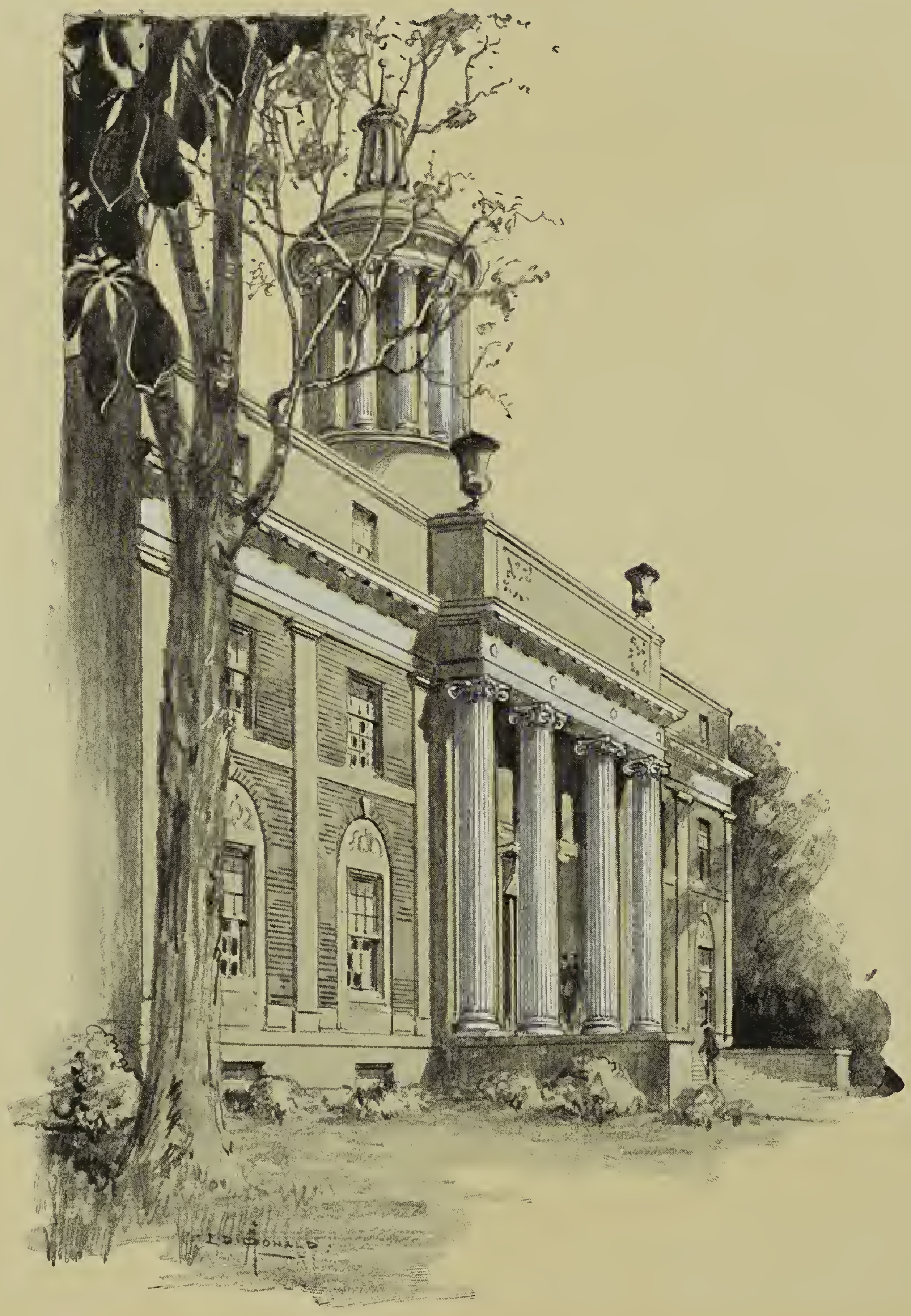


Residence of Doctor Berry, Okmulgee, Oklahoma
*Architects, Smith, Rea, Lovitt & Senter*
This photograph shows the application of Union Metal Large Columns and Flat Pilasters.

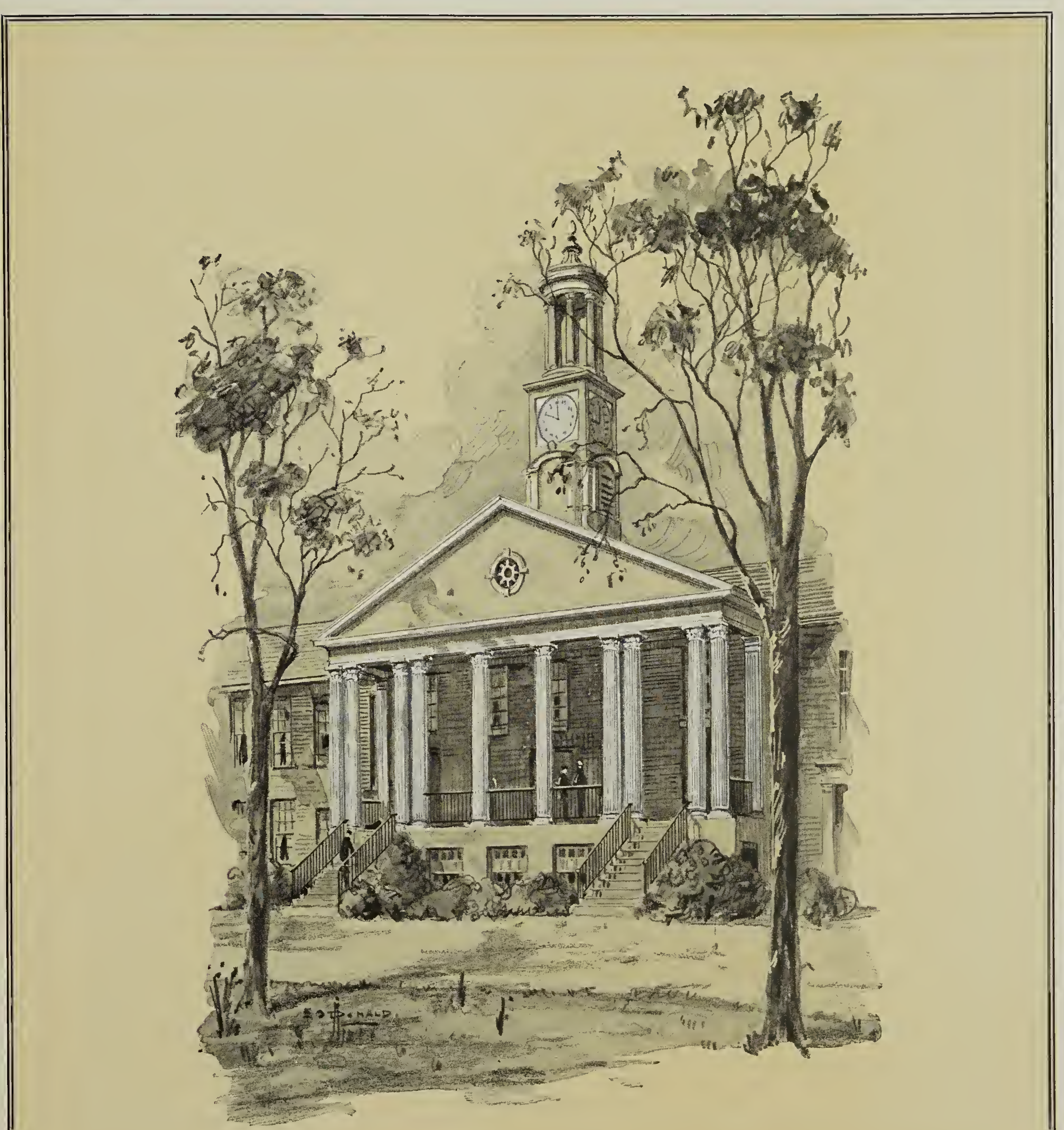
## Attractive Column Entrances



## Attractive Column Entrances

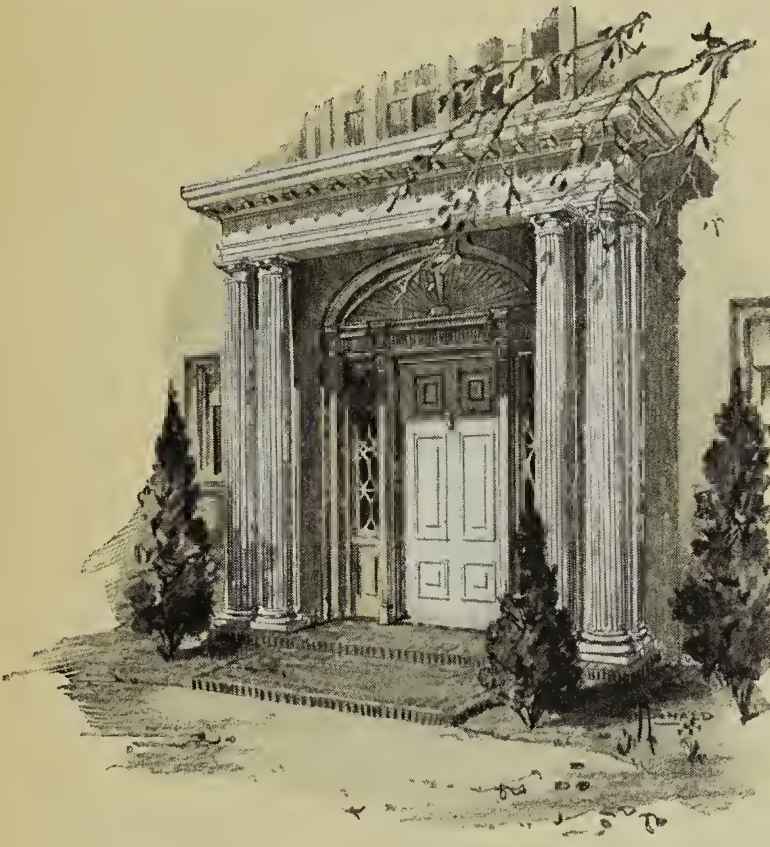


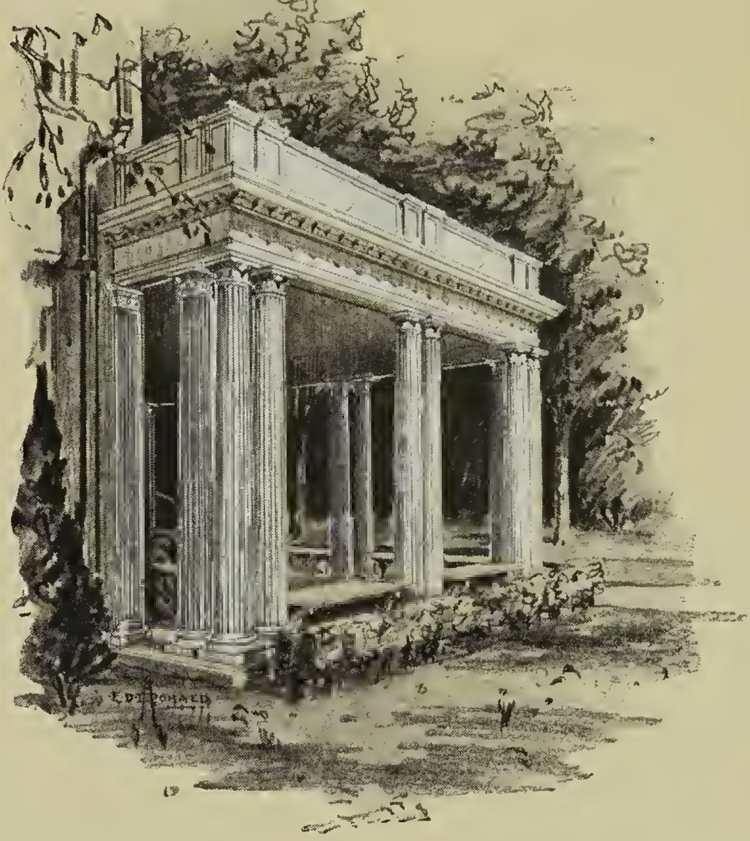
## Attractive Column Entrances

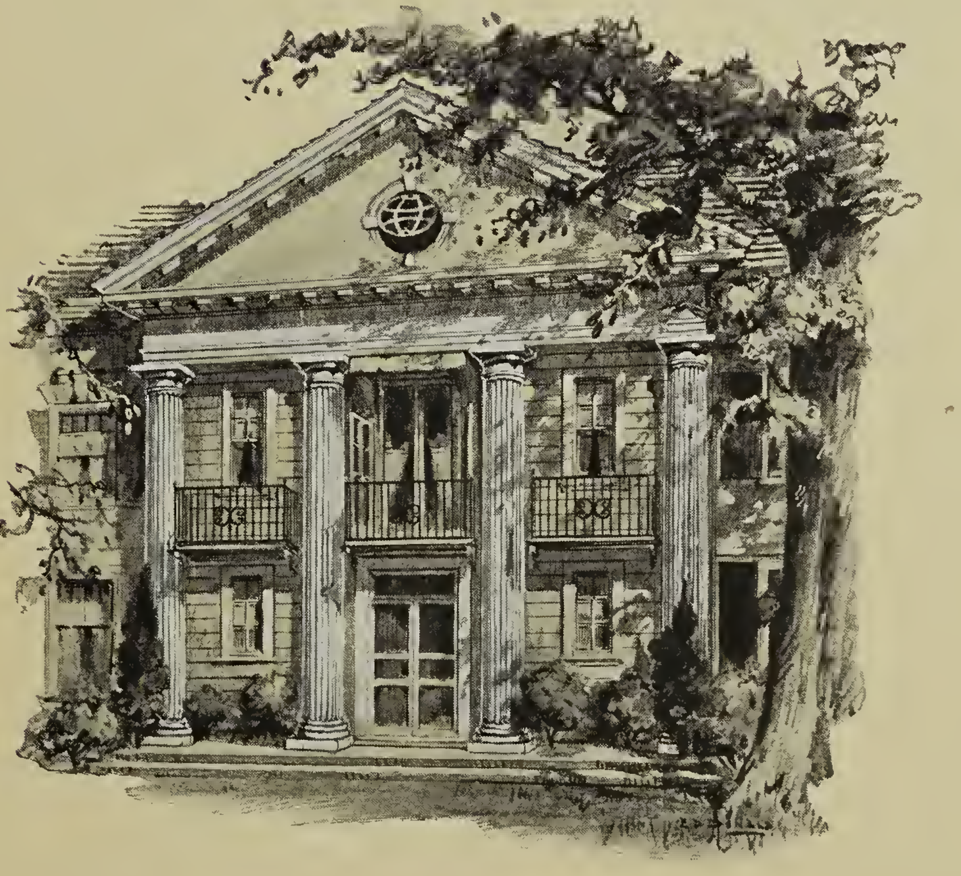


# Attractive Column Entrances

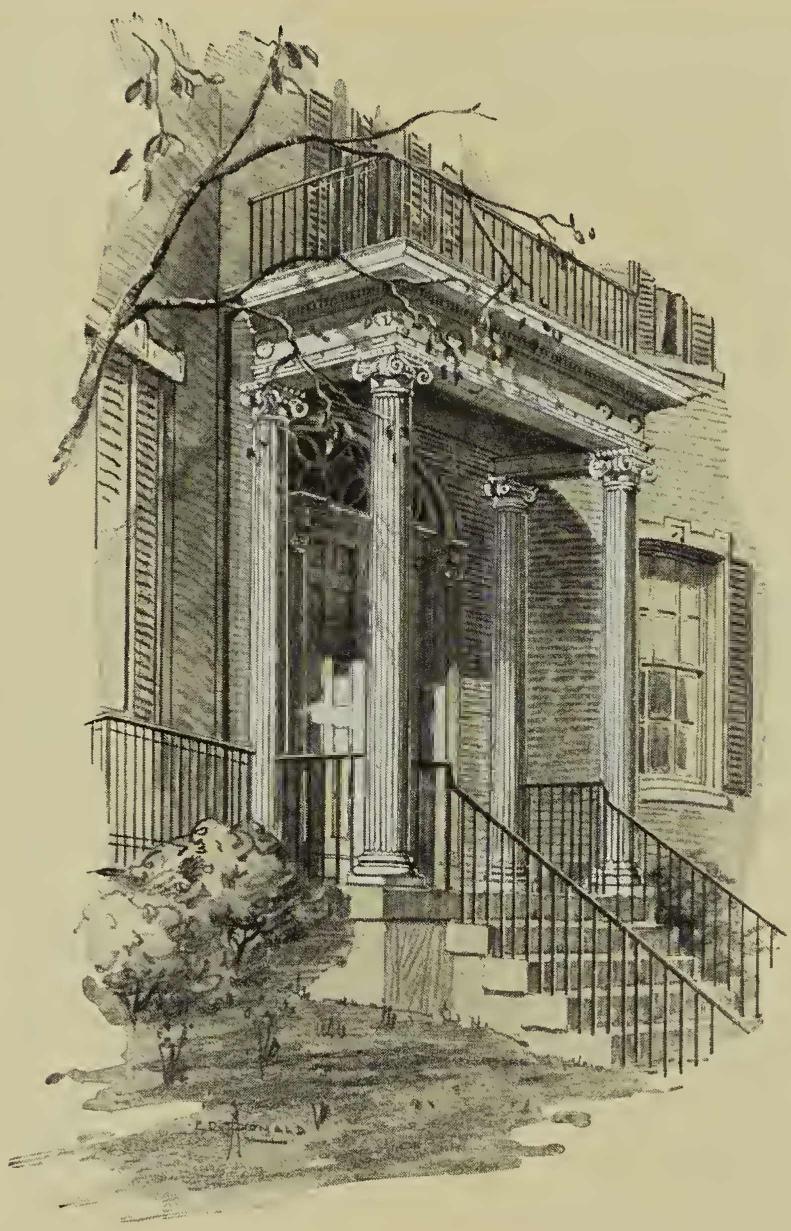
## Attractive Column Entrances

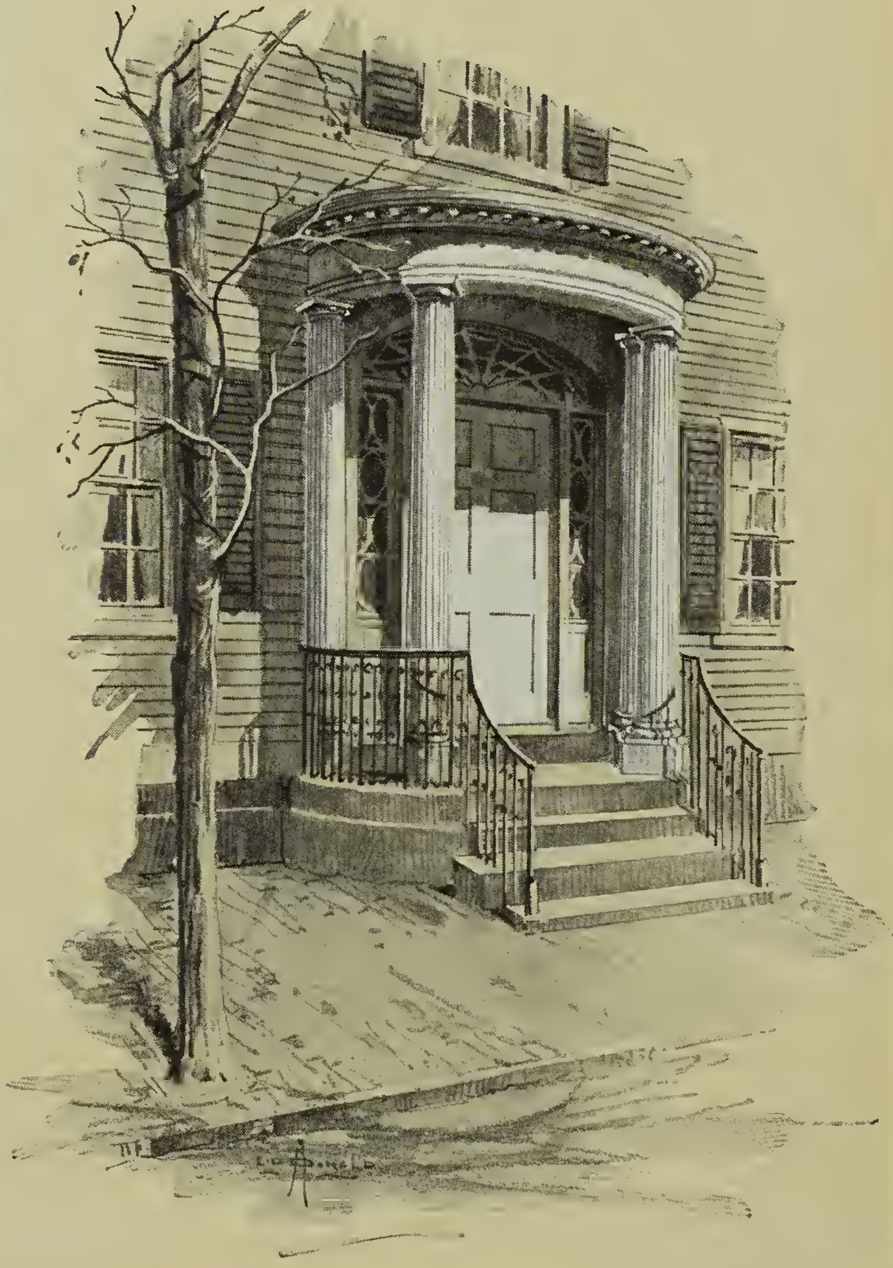




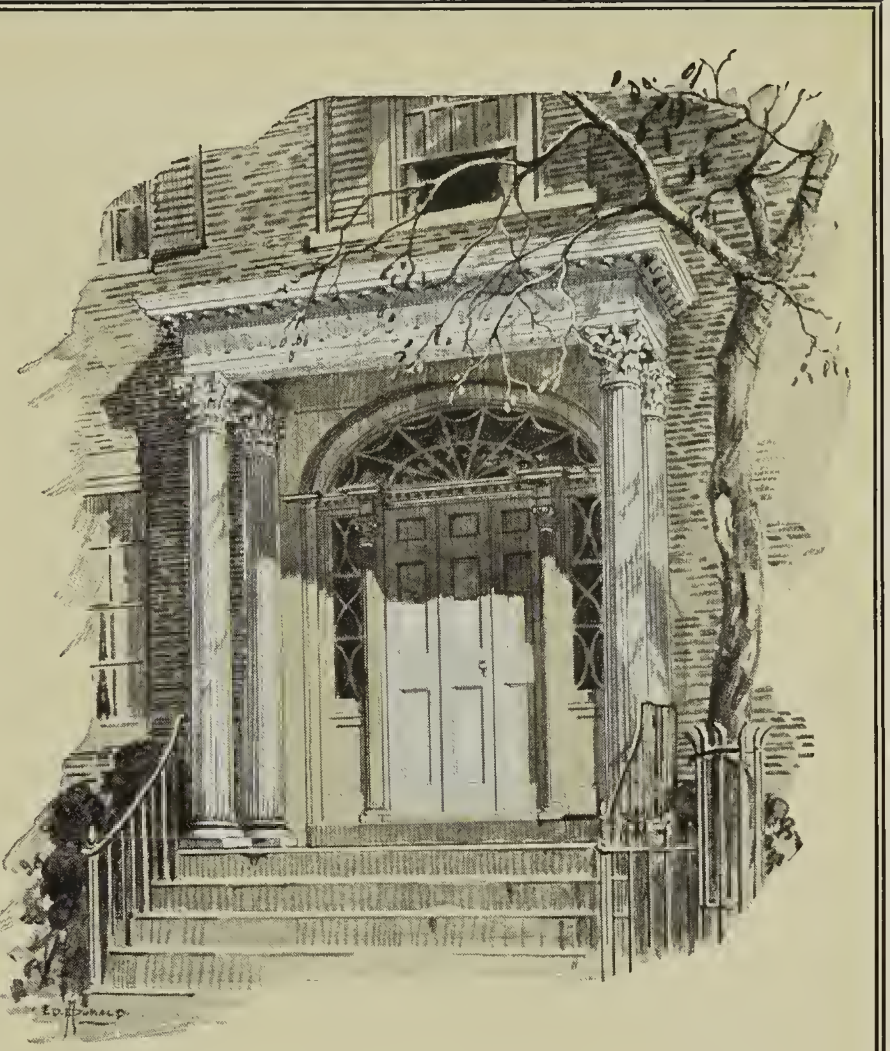


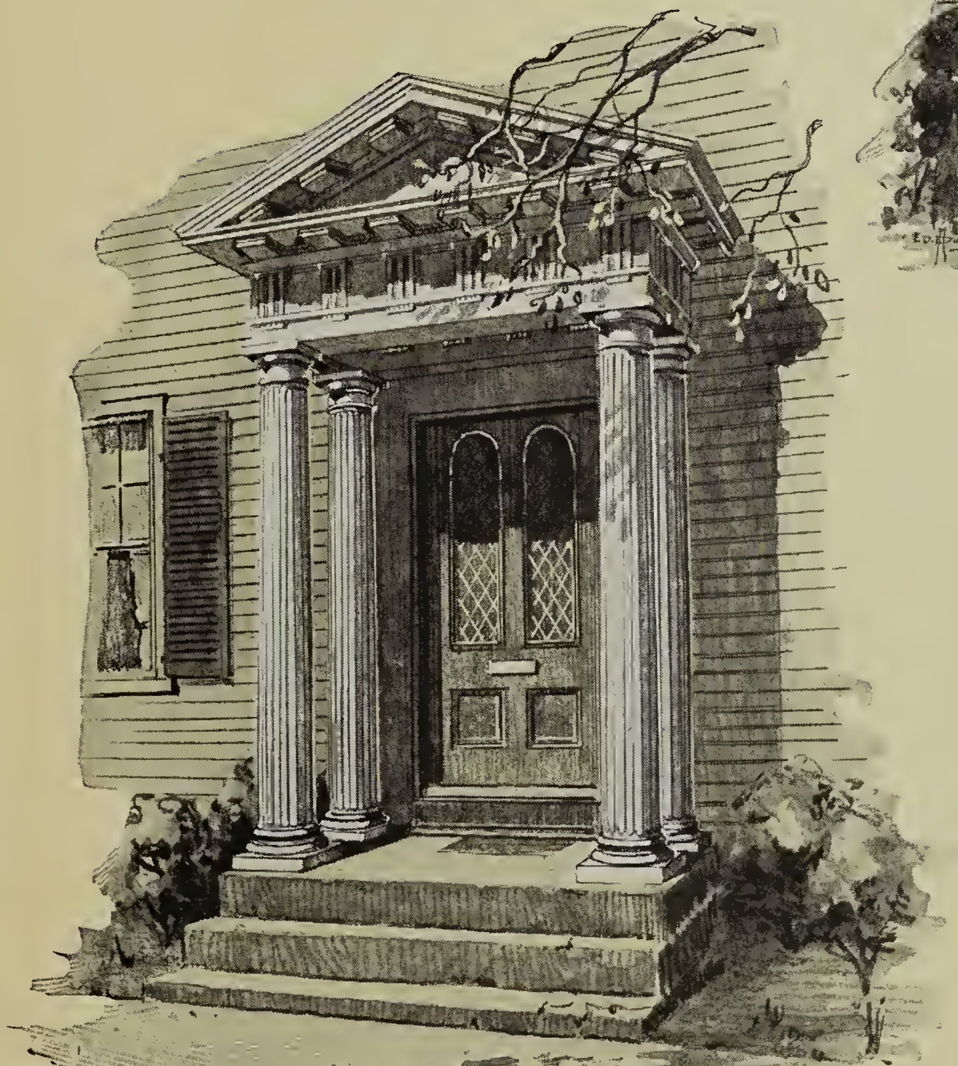
# Attractive Column Entrances



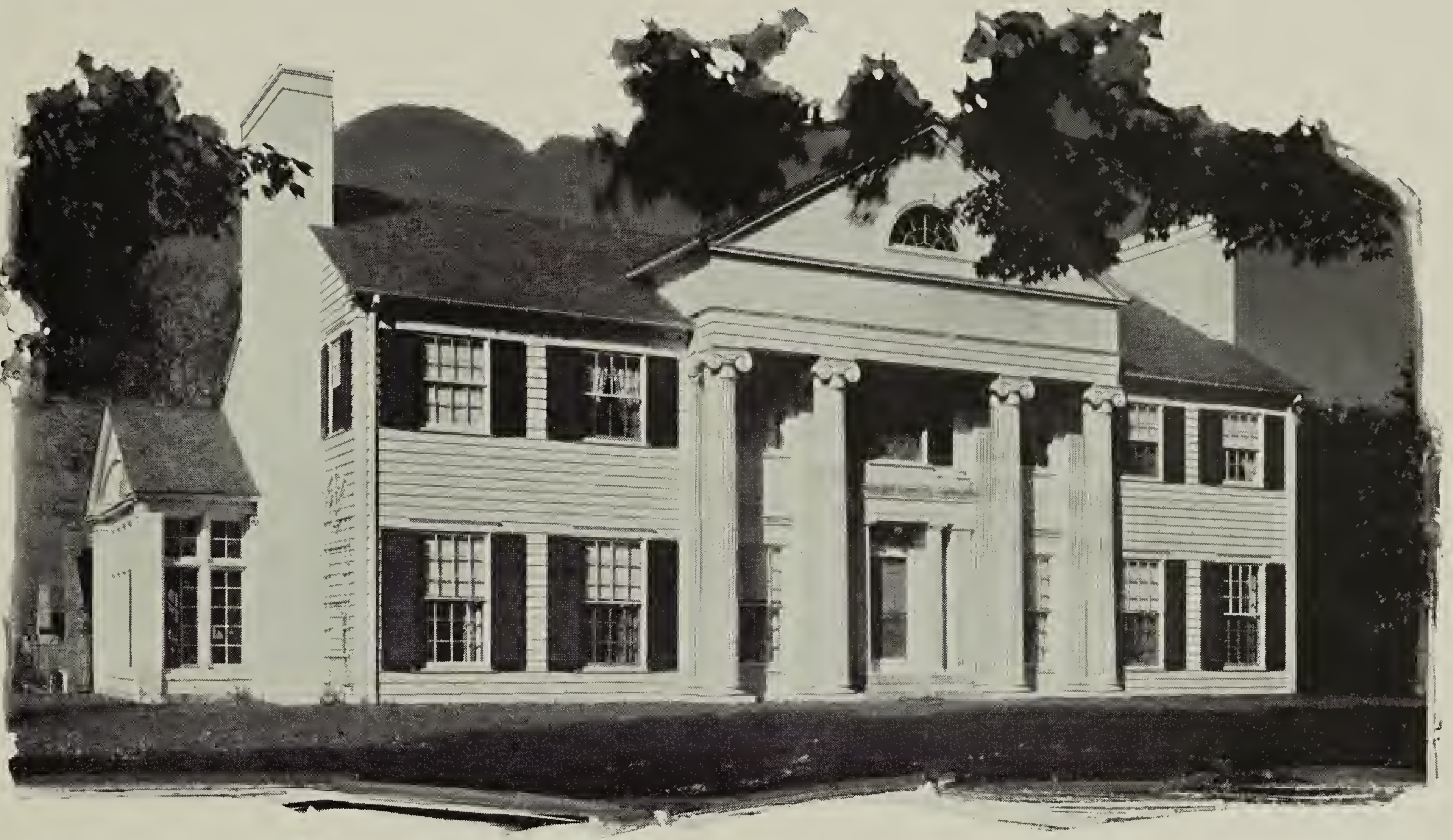


## Attractive Column Entrances

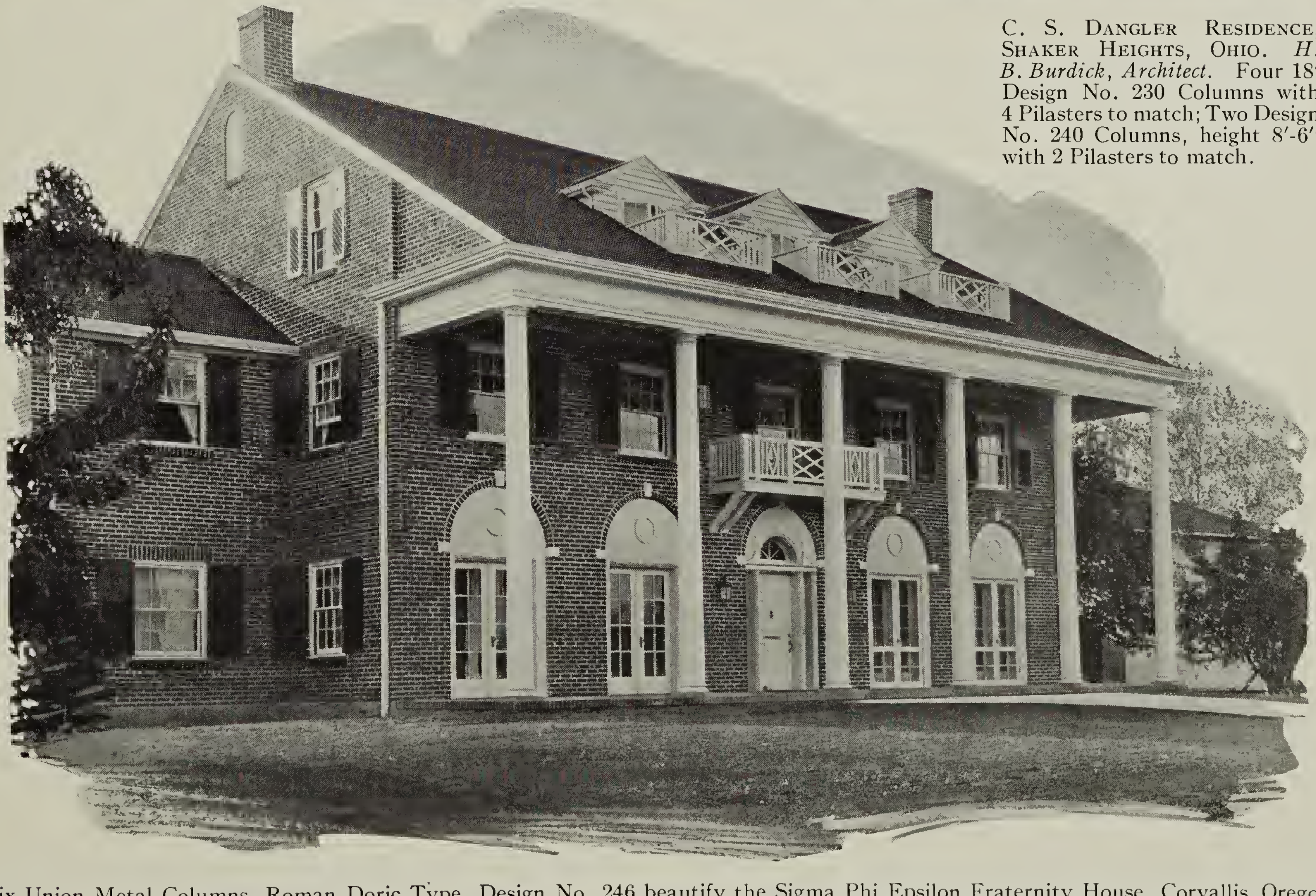




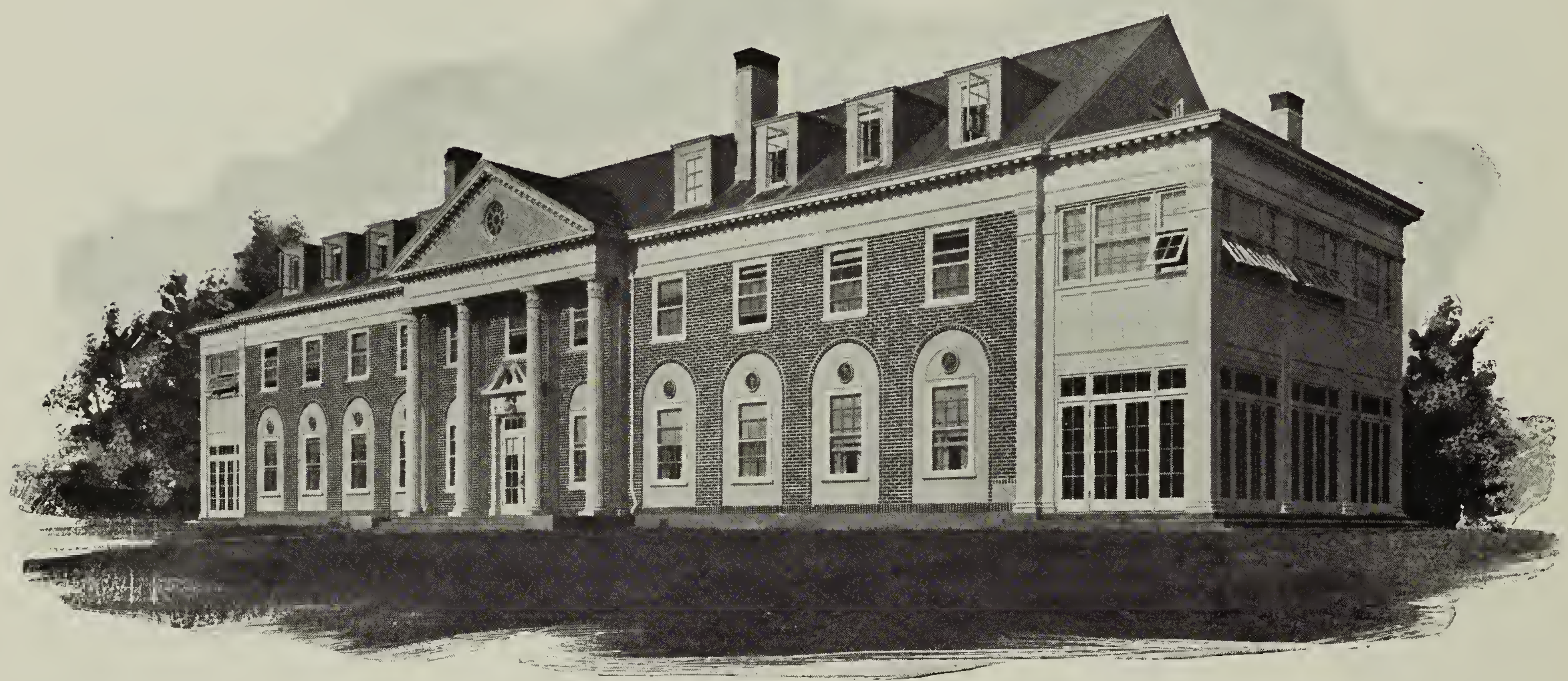
# Attractive Column Entrances



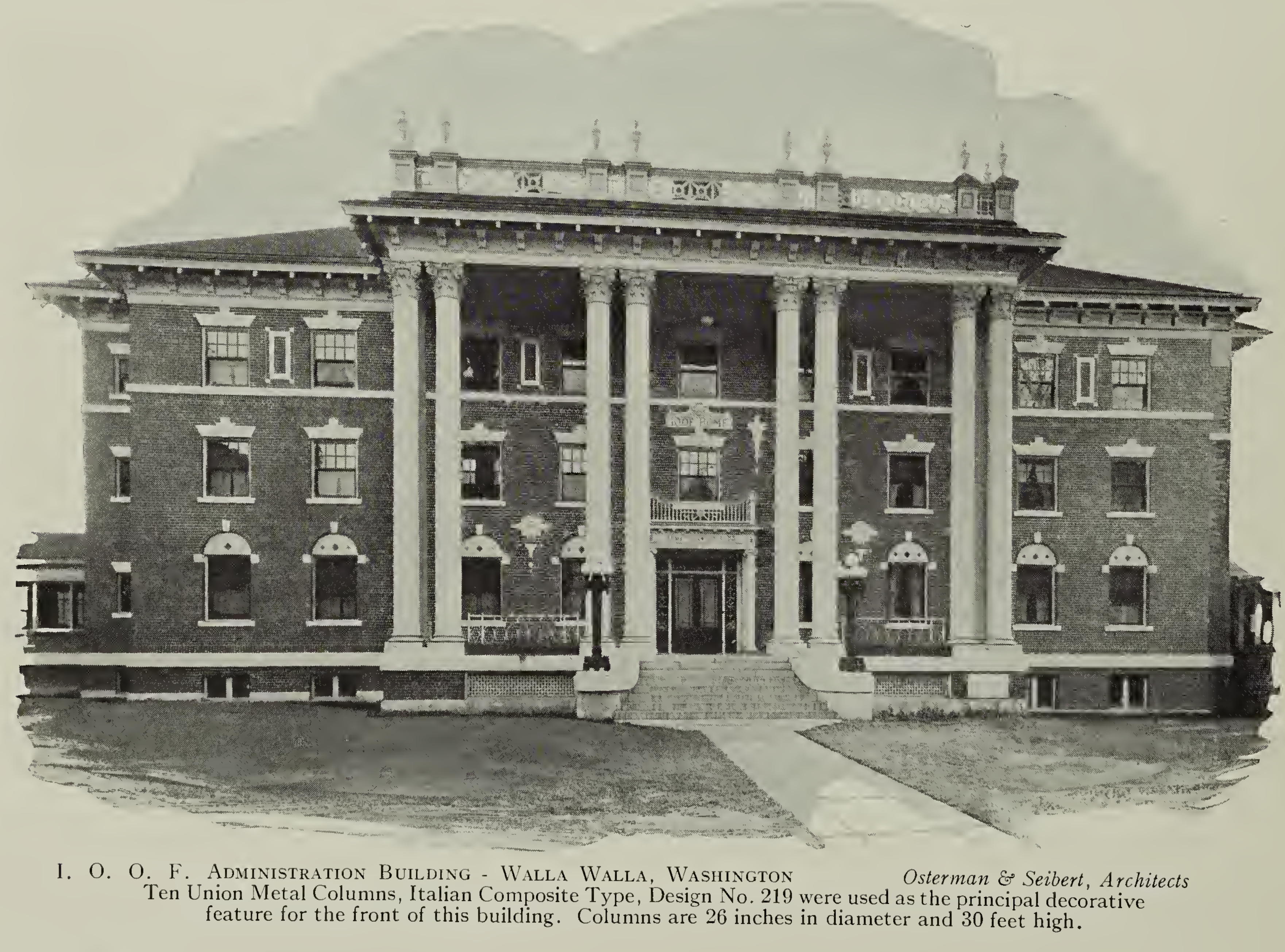
C. S. Dangler Residence, Shaker Heights, Ohio. *H. B. Burdick, Architect.* Four 18′ Design No. 230 Columns with 4 Pilasters to match; Two Design No. 240 Columns, height 8′-6″ with 2 Pilasters to match.



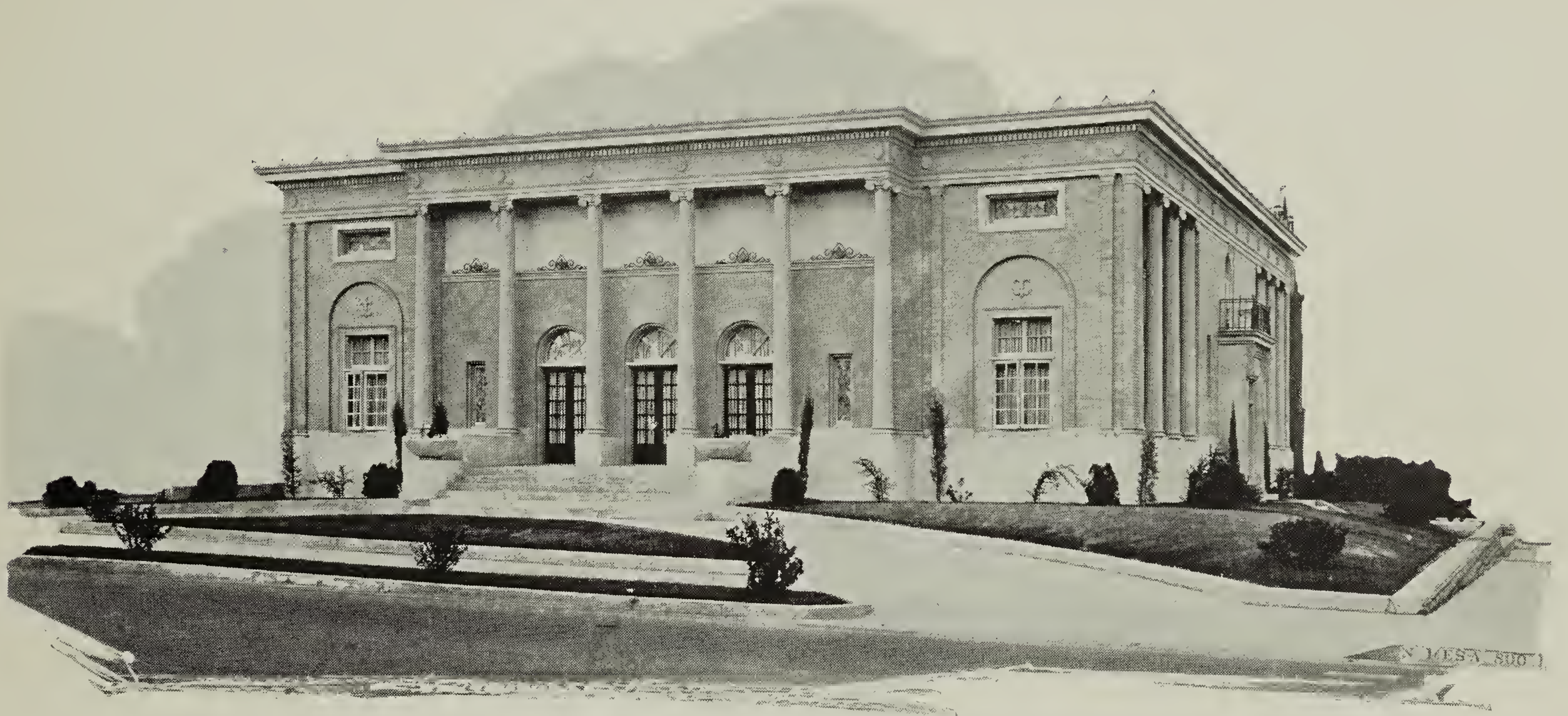
Six Union Metal Columns, Roman Doric Type, Design No. 246 beautify the Sigma Phi Epsilon Fraternity House, Corvallis, Oregon
*Freeman & Strubble, Architects - Salem, Oregon* *McFadden & Swain, Contractors - Corvallis, Oregon*



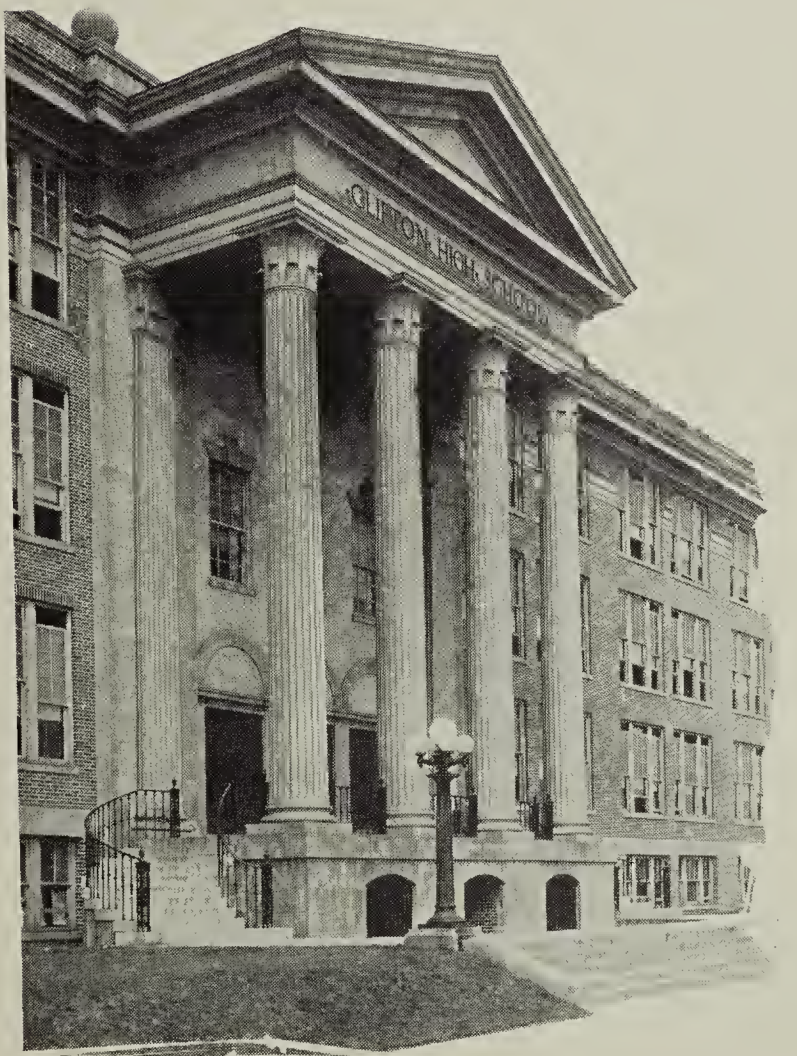
Albertina Kerr Nursery Home, Portland, Oregon
*Johnson-Parker-Wallwork, Architects, Portland*



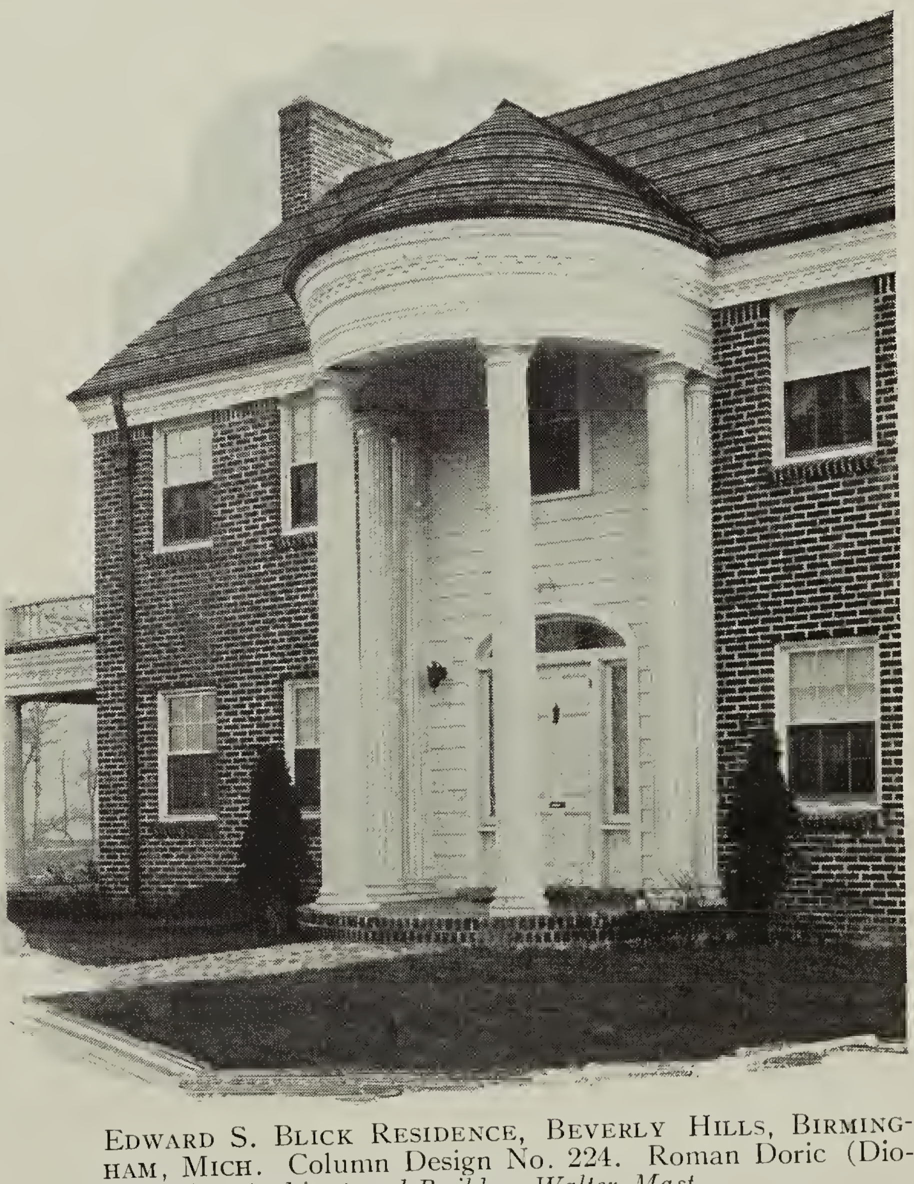
I. O. O. F. Administration Building - Walla Walla, Washington *Osterman & Seibert, Architects*
Ten Union Metal Columns, Italian Composite Type, Design No. 219 were used as the principal decorative feature for the front of this building. Columns are 26 inches in diameter and 30 feet high.



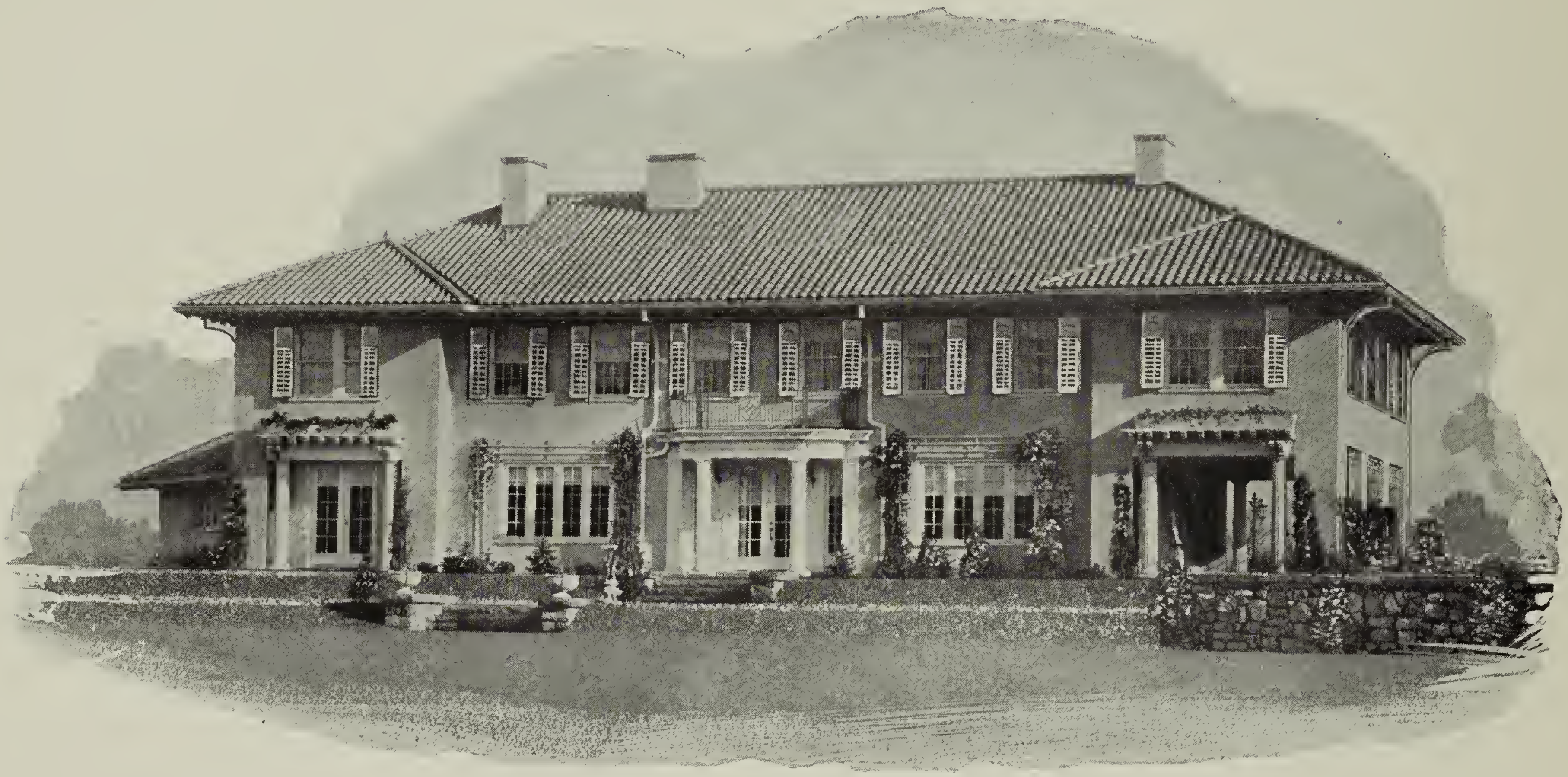
Hartford Mortuary, El Paso, Texas. *O. H. Thorman, Architect.* Fourteen Union Metal Columns 16″ x 16′-10″, Design No. 237.



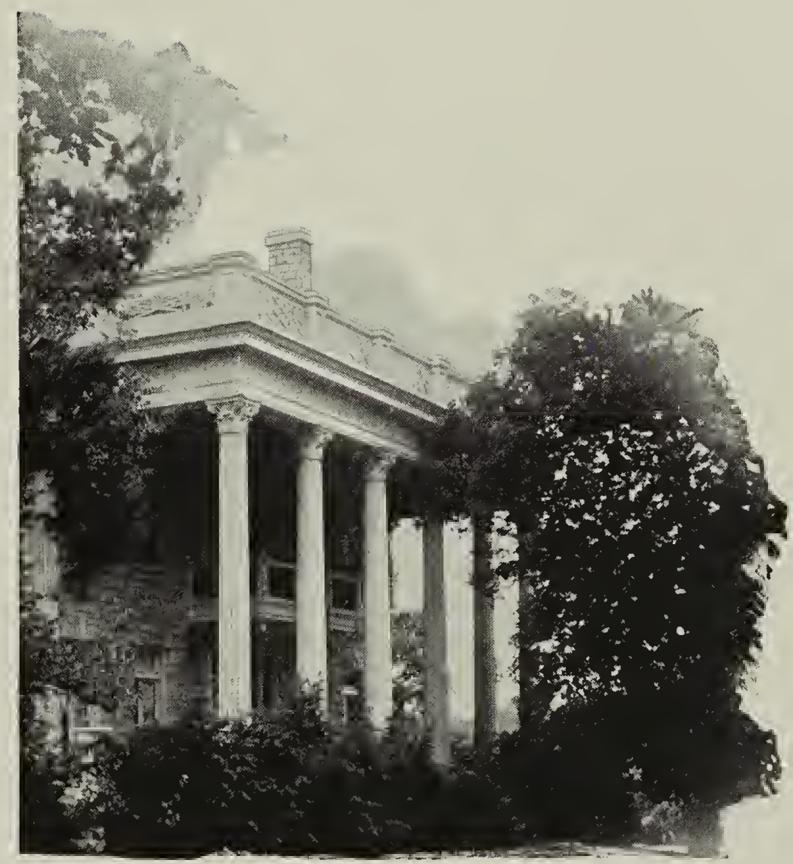
Clifton High School, Clifton, N. J. 4 Union Metal Columns Design No. 213 (Temple of the Winds). Height, 34′-10″ by 42″ diameter; 2 Pilasters to match. *Architects, Lee & Hewitt*, New York City and Patterson, N. J.



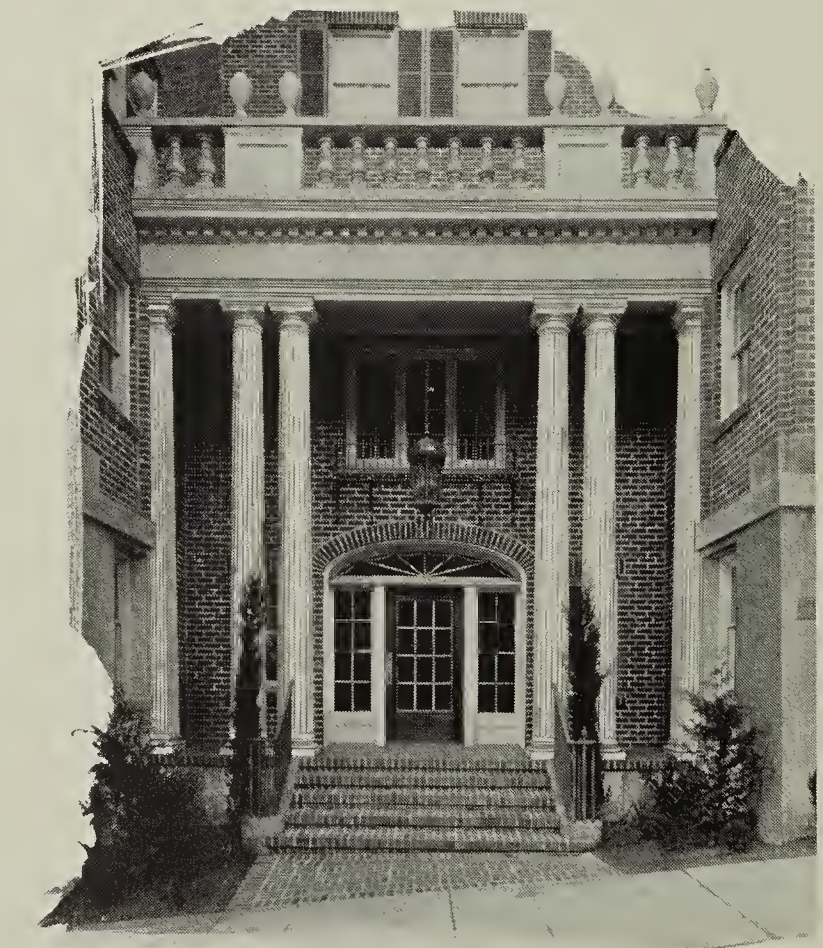
Edward S. Blick Residence, Beverly Hills, Birmingham, Mich. Column Design No. 224. Roman Doric (Diocletian). *Architect and Builder, Walter Mast.*



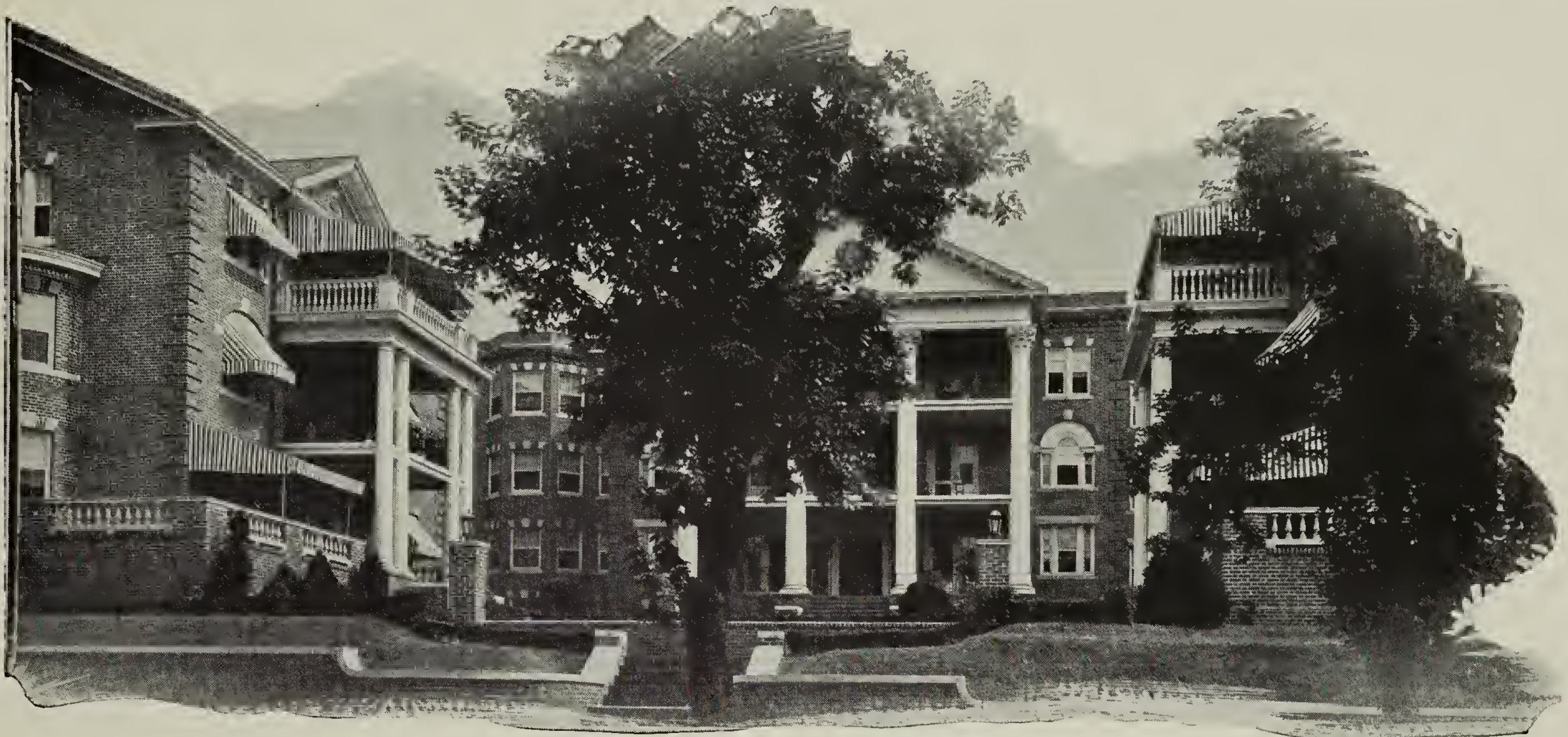
Union Metal Columns on Residence of H. W. Hoover
North Canton, Ohio
*Charles E. Firestone, Architect, Canton*



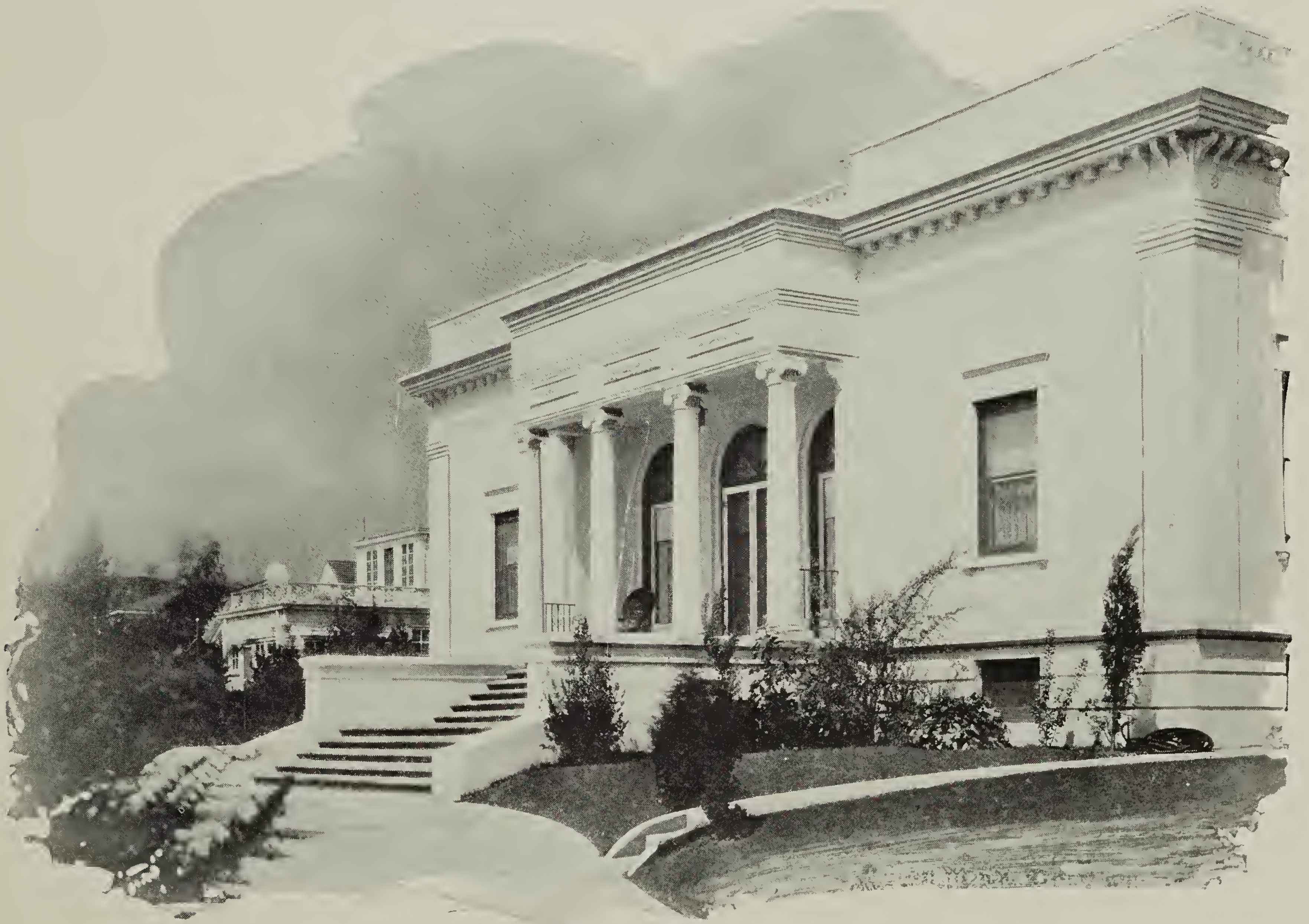
Imposing Entrance to Residence of Misses Herron and Hood, Belle Meade Park, Nashville, Tenn.
*Asmus & Norton, Architects*



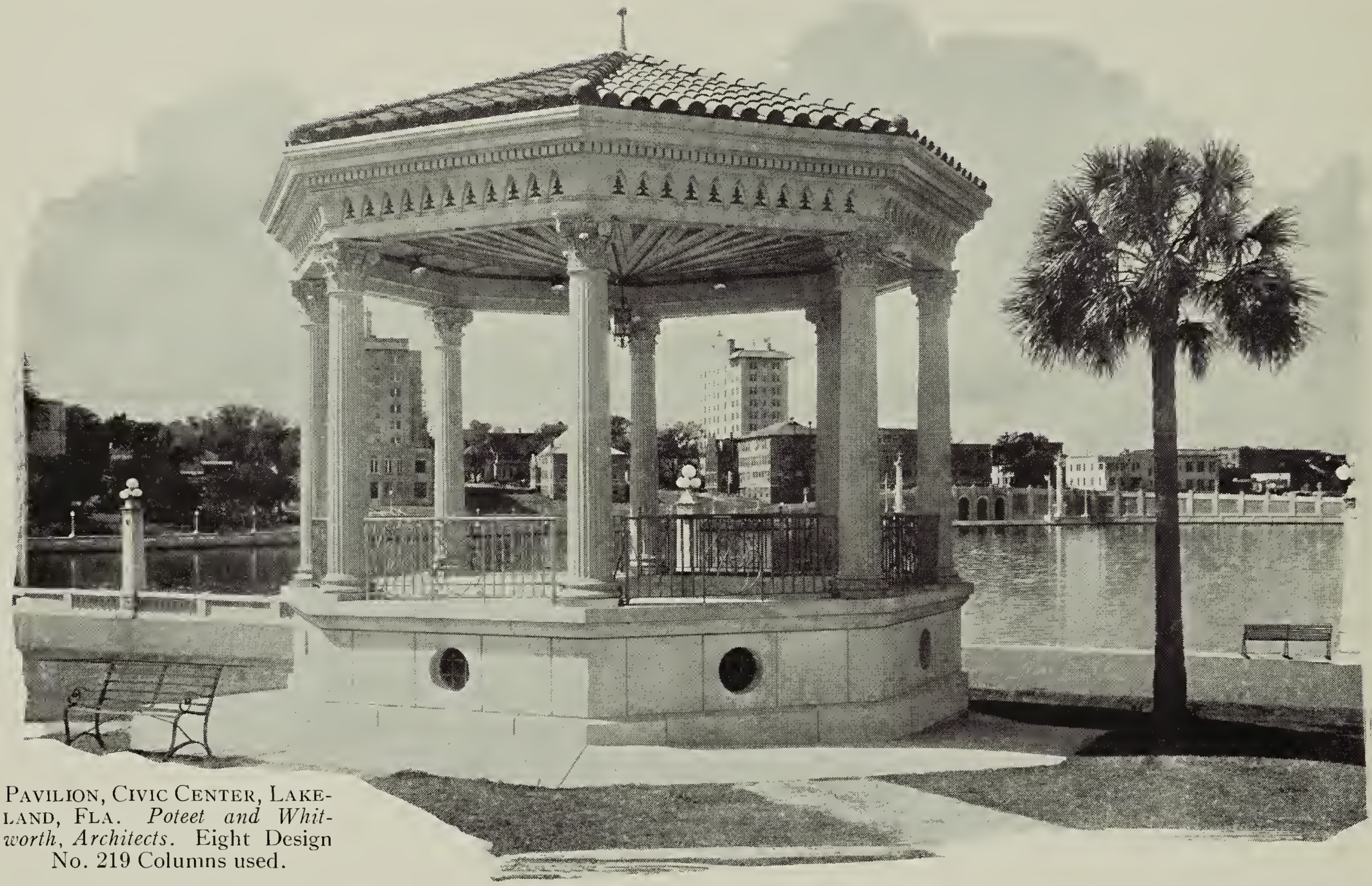
Entrance, John Winthrop Apartments, Seattle, Wash.
Union Metal Columns Design No. 224.
*Harry E. Hudson, Architect.*



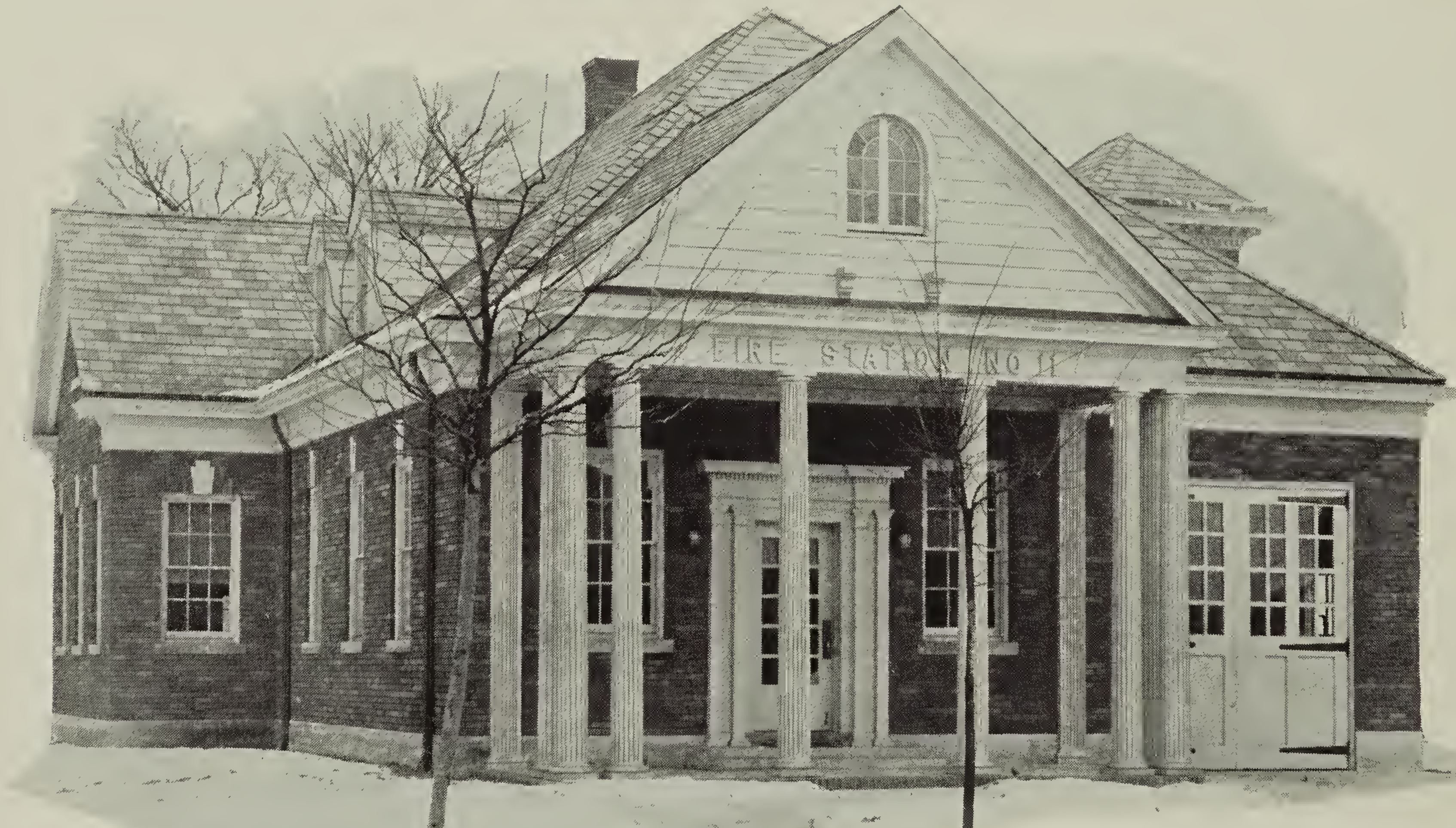
"Spruce Hill Court" Apartments, Philadelphia, Pa., Apartment House. *W. H. Walker, Architect and Builder.* Eight Columns Design 246, Plain Doric, 18 inches diameter, 15 feet high on two wing buildings. Four Columns, Design 212, Roman Corinthian, 28 inches diameter, 28 feet high on main building.



Union Metal Columns, Greek Ionic (Erechtheum) Design No. 230 - *H. M. Banfield, Architect*
Enduring dignity and beauty are expressed in the architecture of the McConnell Residence, Beverly Hills, Calif.



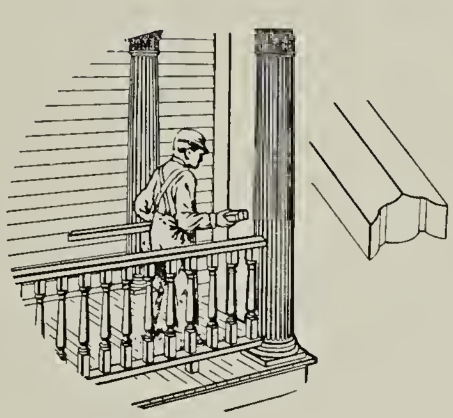
Pavilion, Civic Center, Lakeland, Fla. *Poteet and Whitworth, Architects.* Eight Design No. 219 Columns used.



Fire Station, Ft. Wayne, Ind. *Pohlmeyer and Pohlmeyer, Architects.* Union Metal Columns and Pilasters, Design No. 240, used.

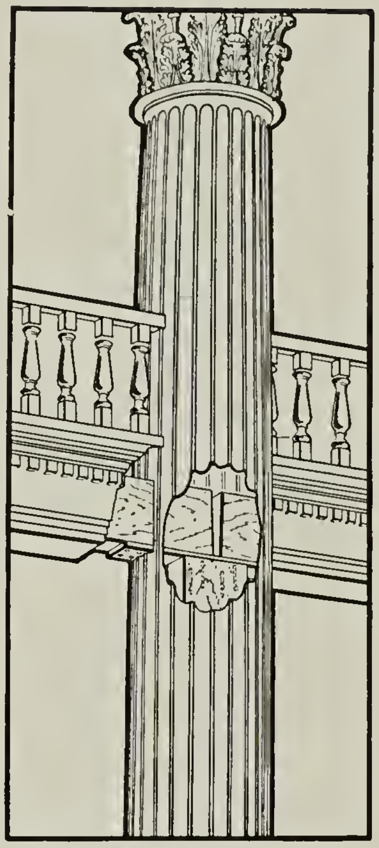
# Additional Installation Details

*To Erect Balustrade and Porch Rail with Union Metal Columns*



Cut ends of rail to fit the flutes in column, using care to make length of rail exact distance between columns at point somewhat above the final resting point. The taper of the columns will admit the rail, and permit it to be forced down to the proper position. The steel flutes will then hold the rail secure.

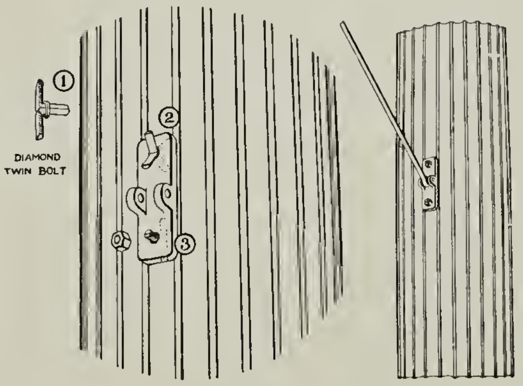
To prevent lower rail and balustrade being raised after setting, block may be nailed between lower rail and floor.



Where extremely heavy weights are to be suspended, cut a section out of the steel columns at the proper heights, as indicated on architect's plans. This admits the balcony floor supporting members into the steel columns and the weight is supported by timbers (6 x 6 inches or 8 x 8 inches, etc.) as shown in drawing. Contractor inserts supporting timber when columns are being erected.

*Alternative:* When abnormally heavy weights are to be suspended by the whole column, it is customary to run a heavy timber (8 x 8 inches or 10 x 10 inches, etc.) from bottom to top. If balcony is to be suspended, cut section out of column at specified height. Balcony supporting joists enter through this opening and are mortised into the sides of the upright supporting timber.

## Method of Attaching Awning Hooks to Union Metal Columns



No. 1 represents a Diamond Twin Bolt. It is shown separate from awning hook to give an idea of how it is inserted in its original form into the column.

No. 2 shows it inserted through the awning hook and column. It is partly pressed together on the outside and is opening up on inside as indicated by dotted lines.

No. 3 shows twin bolt pressed together on outside and separated on inside so that the inside lugs bear against the inside of shaft. In this position the nut is placed on twin bolt and tightened. Each awning hook is held to column by two of the twin bolts.

Other sketch shows awning hook and supporting rod in place.

# Build a Pergola in Your Garden

FOR the full enjoyment of grounds and garden, a pergola, rose screen or arbor is essential. A pergola offers a much needed contrast to the solid masses of shrubbery and foliage and breaks up the monotony of level grounds into cozy and restful nooks.

The graceful lines of the columns provide an ideal background for climbing vines, and as the trellised beams are covered over, the pergola becomes the most pleasant feature of the garden.

A pergola often serves as a retreat, a vine-covered bower. Frequently it leads off into the lawn, sometimes to the garage or terminates at a pond or miniature garden. Often it covers or surrounds a garden pool or serves as the center piece for an old fashioned flower garden.

Not only does the pergola make outdoor living possible during that part of the year when it is so worth while, but it greatly enhances the monetary value of the entire property.

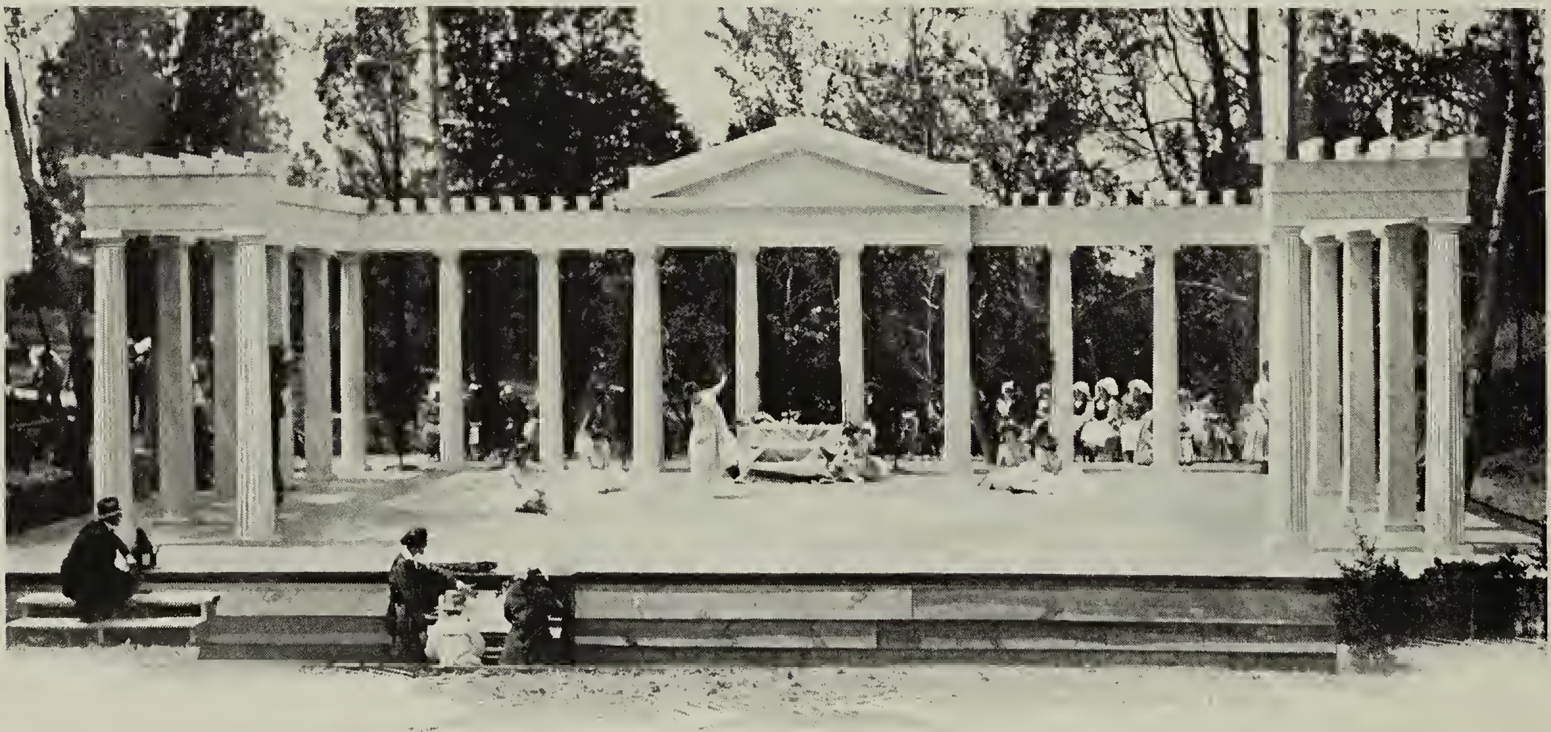
## Ordering and Erecting Union Metal Pergolas

We will at all times hold ourselves in readiness to supply complete pergolas including columns, anchor rods, wood beams, rafters and all other parts. By ordering the columns and tie rods only of us and having a local contractor obtain the necessary wood structure of a local mill, a saving is made in freight.

Upon selecting any Union Metal type of pergola or rose screen, we will supply all metal parts and a full set of blue prints with instructions by which your contractor can order rafters, beams, trellises, etc., and erect the entire pergola.

However, prices applying to pergolas cover same complete with wood superstructure, metal columns, tie rods, bolts, nuts, etc., everything being cut and fit ready for erection upon arrival.

Many designs of pergolas and rose screens other than those listed in this catalogue are available.



A suggested use of Union Metal Columns on Outdoor Greek amphitheatre.

# Enduring Weatherproof Construction Necessary In Pergolas and Garden Equipment

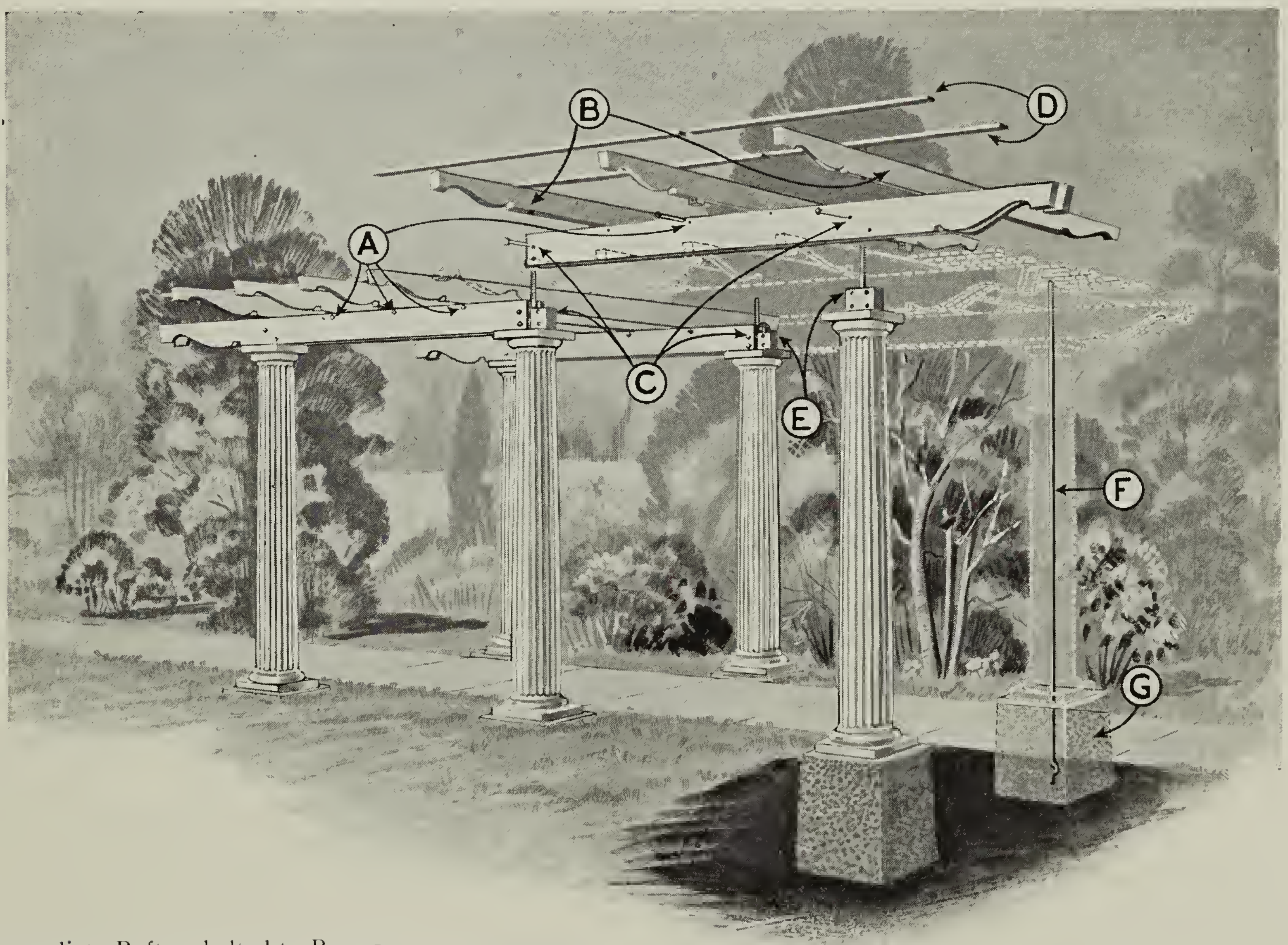
The value of a pergola, rose screen or trellis depends upon its permanence.

While originally erected largely for decorative purposes, the pergola today is frequently constructed with cement or stone floor and often made a permanent part of a garden pool or attached to another building. In all cases the columns are constantly exposed to the overfriendly sun from above, and the damp ground or cement foundation at their bases. This dampness together with the heavy mass of vines and shrubbery creates a condition that quickly destroys wood columns or makes them so unsightly that frequent replacement is necessary. With their many joints, they swell in the moisture, shrink again with the hot sunshine, and soon the cracks appear, exposing unpainted wood to the certain effects of decay.

### UNION METAL PERGOLAS ARE PERMANENT AS WELL AS BEAUTIFUL

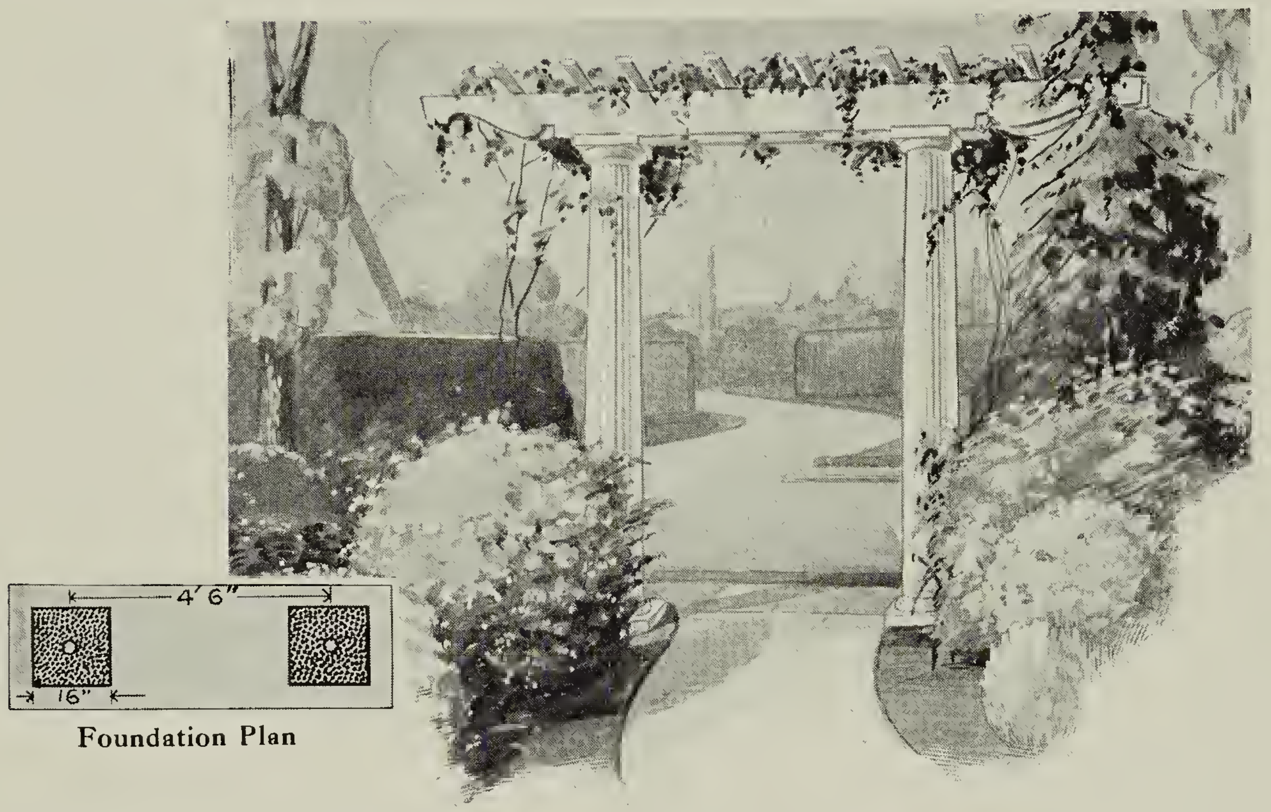
How then can a pergola be made permanent? How can the owner be relieved of the trouble and expense of installing new columns and tearing down his vines when they are just reaching maturity? There is just one answer: By using Union Metal Columns, "The Ones That Last a Lifetime."

These enduring pressed steel columns have solved the splitting and rotting problem on thousands of porches and building entrances and are extensively used for pergolas everywhere.



(A) Intermediate Rafters bolted to Beams.
(B) Anchor Rods pass through Rafters located over Columns.
(C) Beam bolted to Spacing Block.
(D) Lattice tacked on to Rafters.
(E) Spacing Block bolted down on top of Column.
(F) Steel Anchor Rod provided with each Column.
(G) Concrete sub-base.

Sketch showing construction and erection details of a typical Union Metal Pergola. This is a two section, six column pergola, same style and construction as three section, eight column Design No. 60, Page 35 of this book. Although Union Metal Pergolas vary greatly in shape and size, this sketch is typical of their simple construction and easy erection.

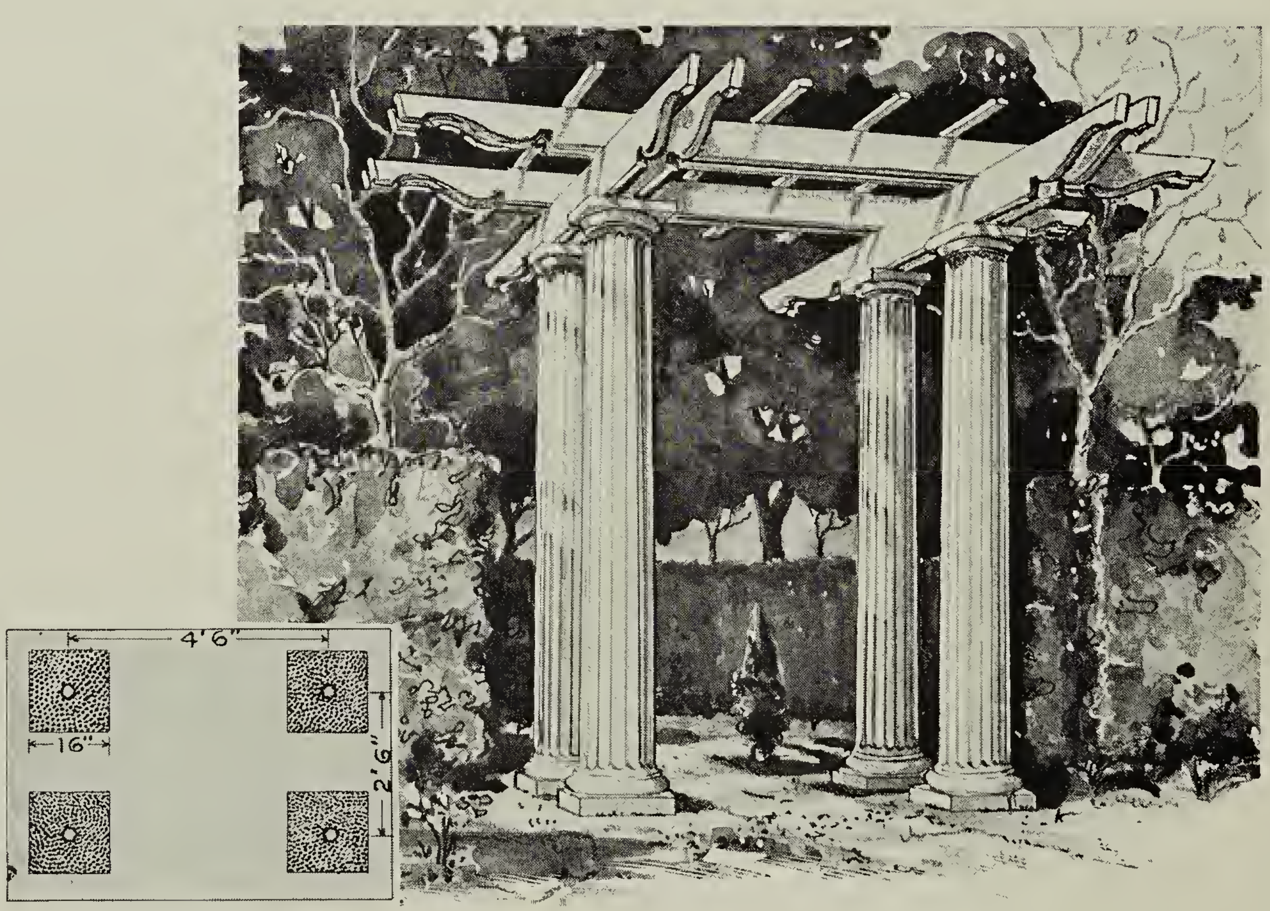


Foundation Plan

### Design No. 50

### Two Column Gateway Pergola

Specifications: Two Union Metal Columns, Design 240, Modern Doric, 10". Base Diameter: 8" Top Diameter, 7' high, wood beams 2" x 8", lath 1" x 2".

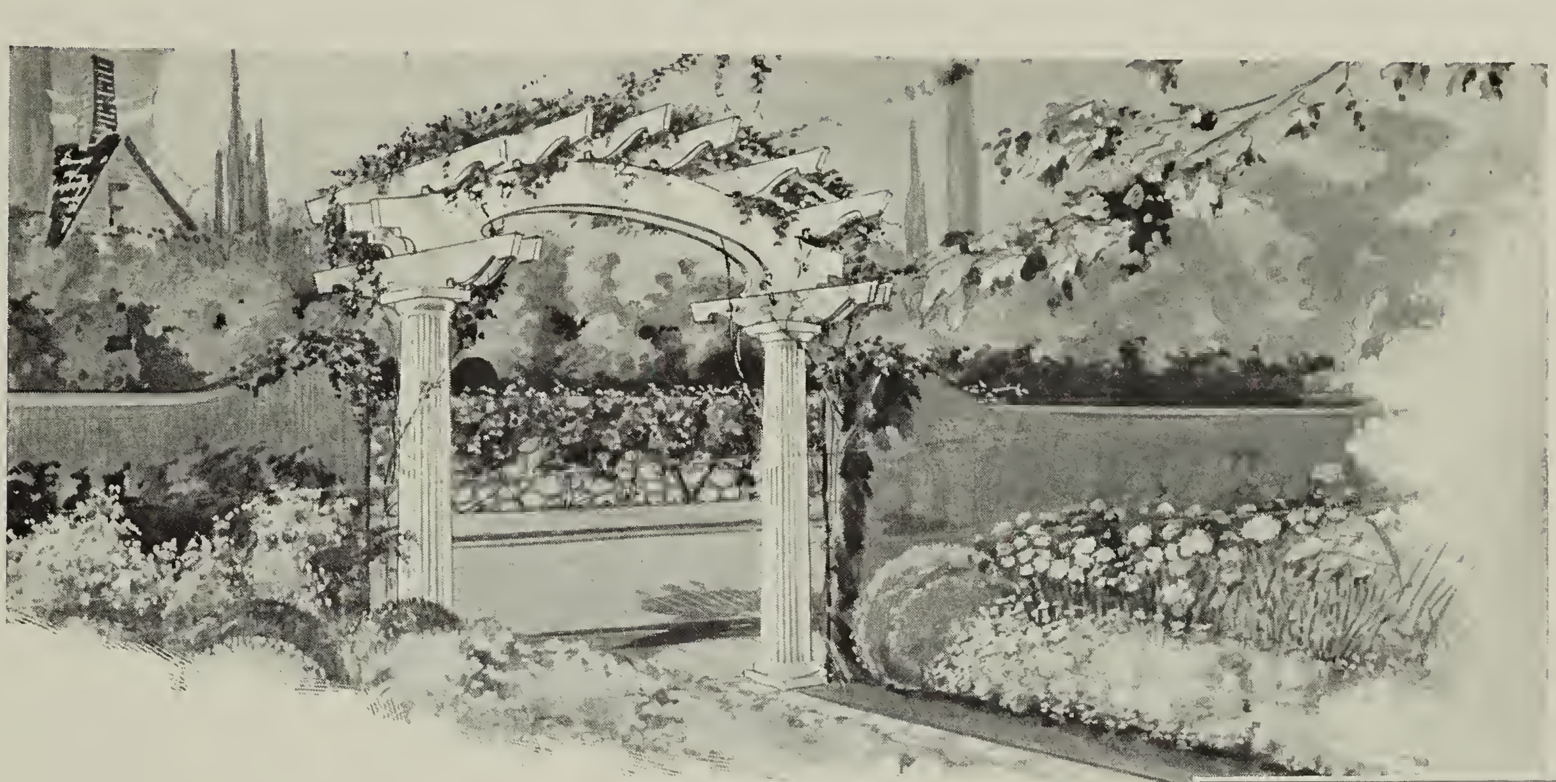


Foundation Plan

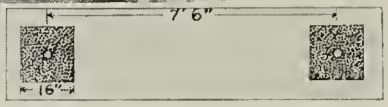
### Design No. 51

### Four Column Gateway Pergola

Specifications: Four Union Metal Columns, Design 240, Modern Doric, 10" Base Diameter, 8" Top Diameter, 7' high, wood beams 2" x 8", rafters 2" x 6", lath 1" x 2".



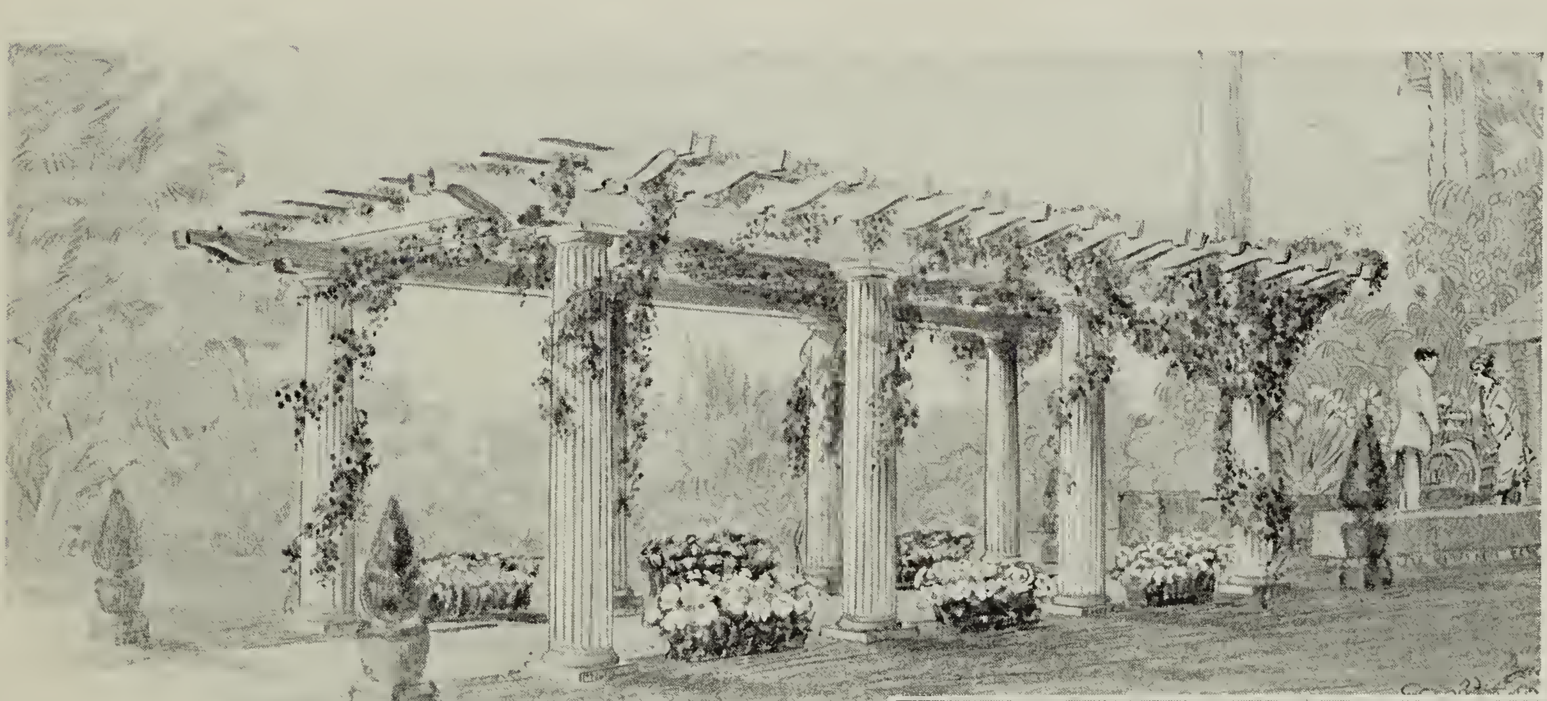
**Design No. 52**



Foundation Plan

## Two Column Gateway Arch

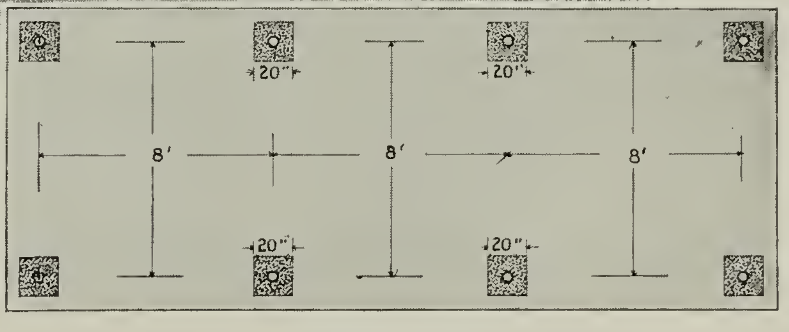
Specifications: Two Union Metal Columns, Design 240, Modern Doric—10″ Base Diameter, 8″ Top Diameter, 7′ high. Wood beams 2″ x 10″, curved top 2″ x 10″, top rafters 2″ x 6″. Lath 1″ x 2″.



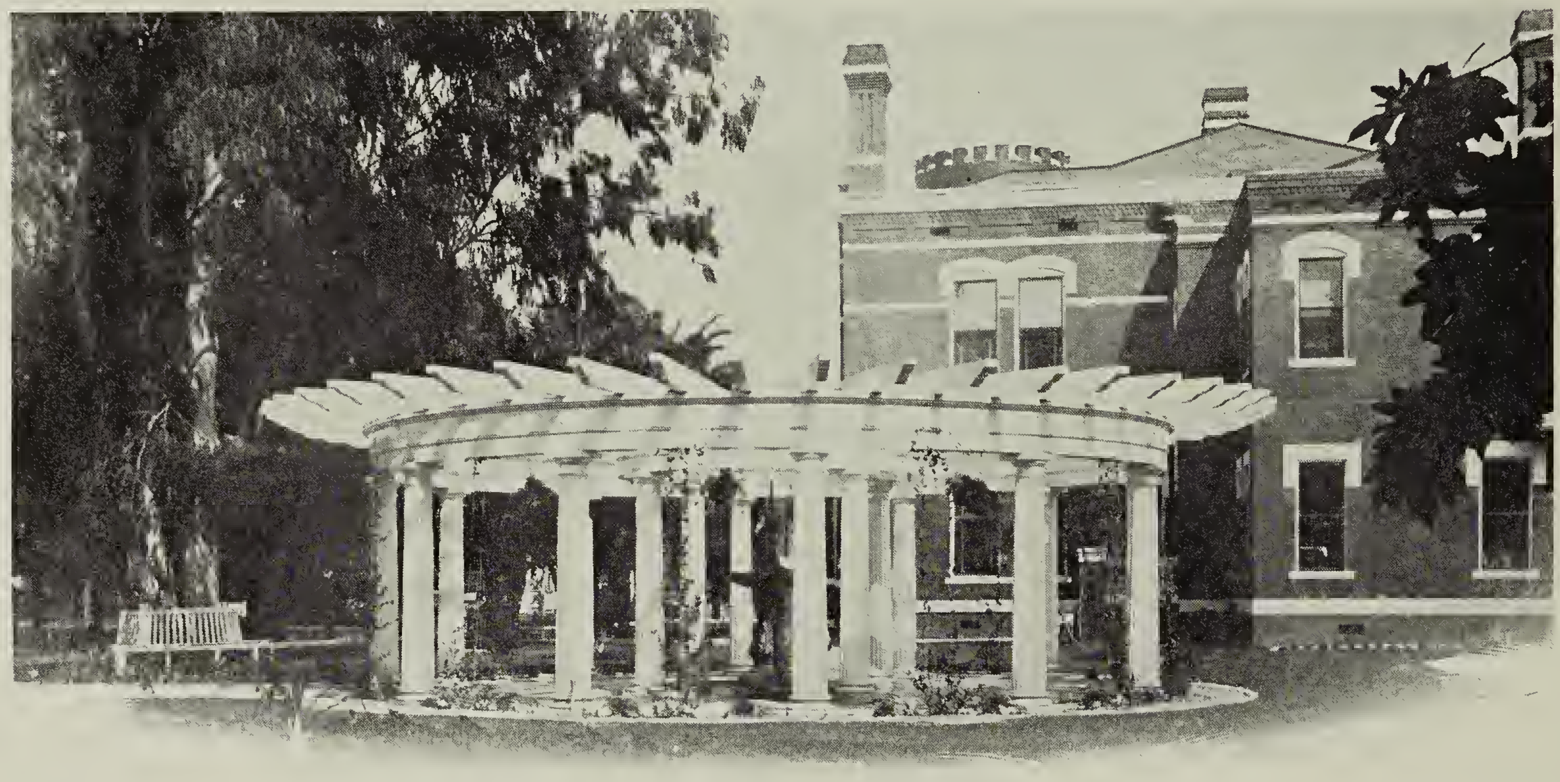
**Design No. 60**

## Eight Column Pergola

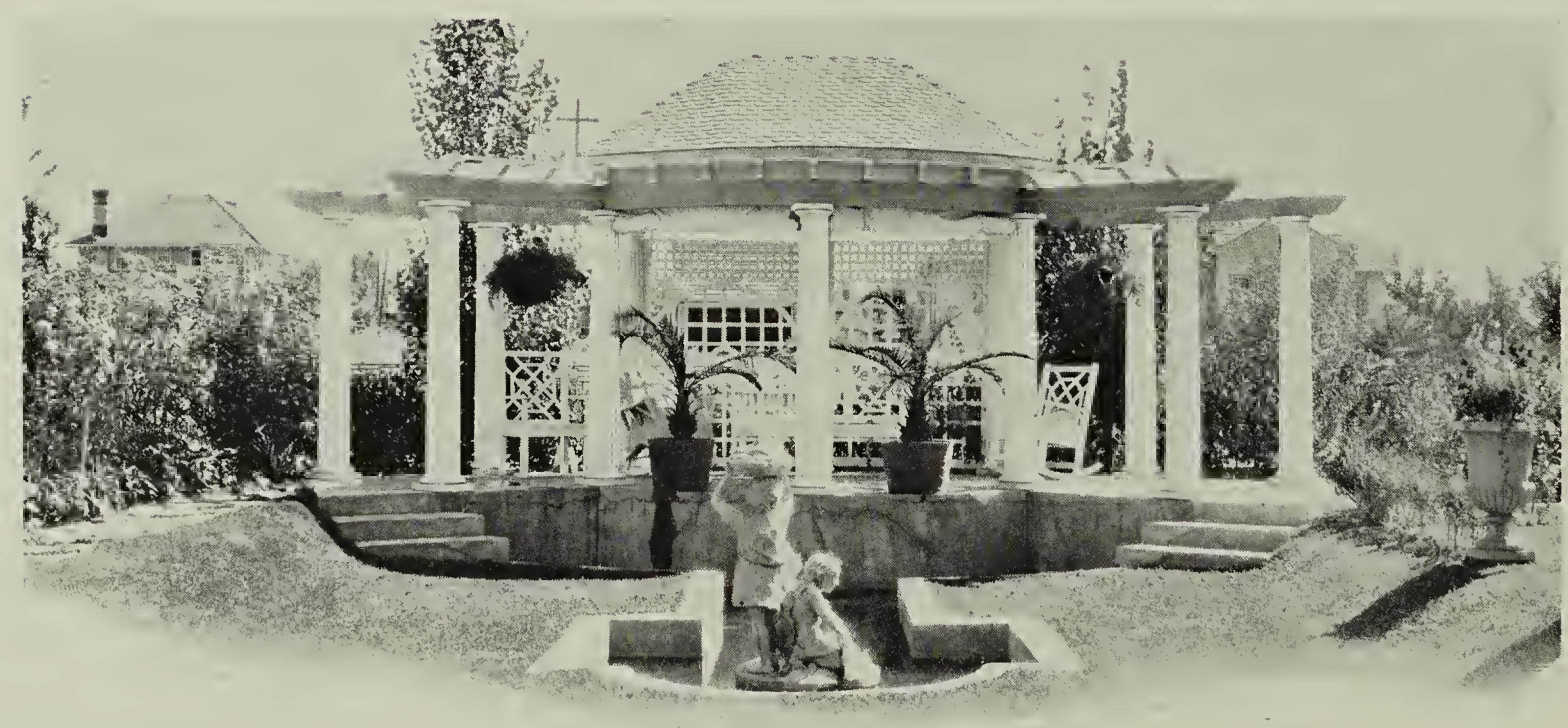
Specifications: Eight Union Metal Columns, Design 240—Modern Doric—12″ Base Diameter, 10″ Top Diameter, 8′ high. Wood beams 2″ x 8″, rafters 2″ x 6″, lath 1″ x 2″.



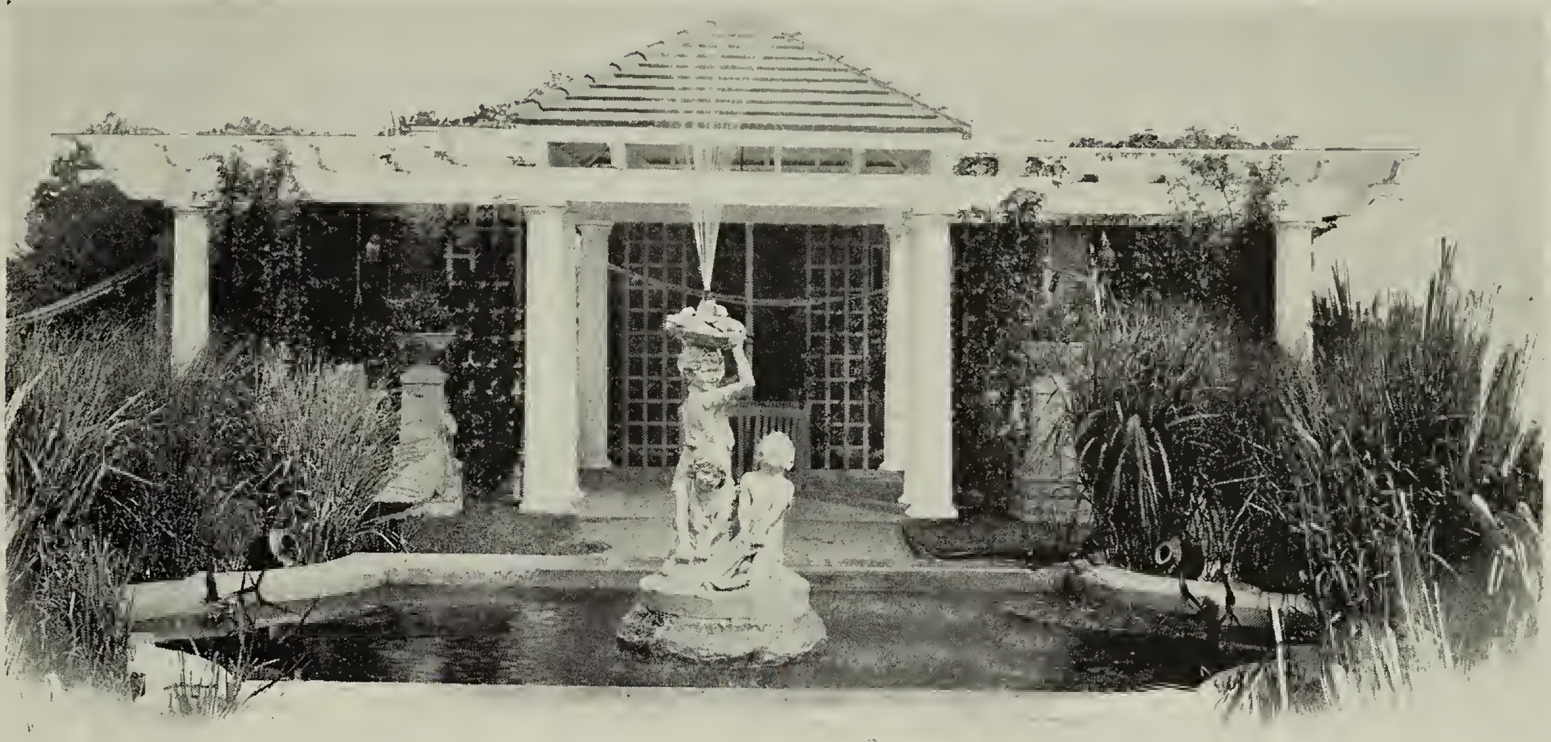
Foundation Plan



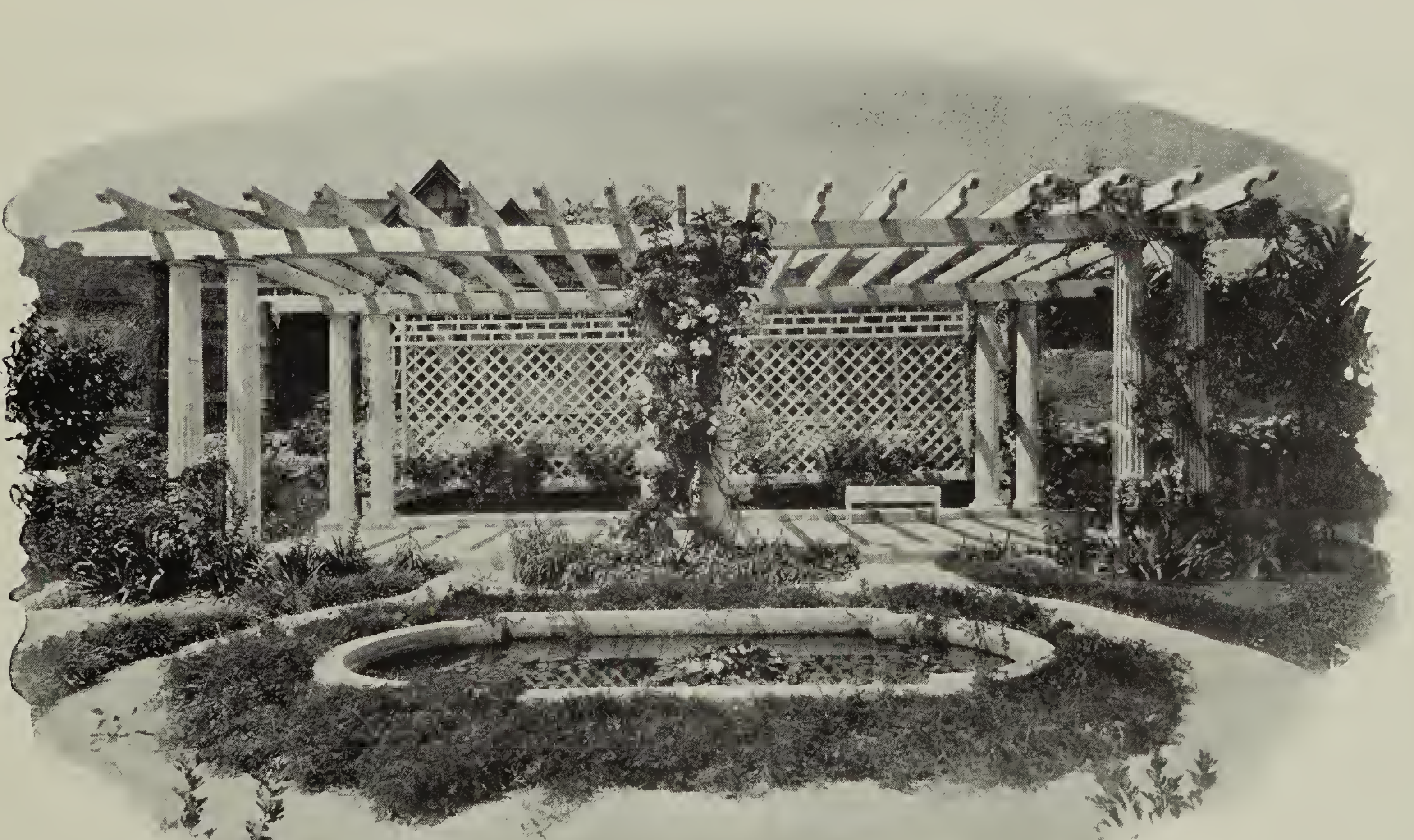
Union Metal Circular Pergola in the Garden of P. O. Knight, Tampa, Florida.
*A. H. Johnson, Architect*



A beautiful Pergola and Fountain at residence of J. F. Mauro, Denver, Colorado. De Boer and Pessman, Landscape Architects. This combination pergola and summer house has, as its principal decorative feature, twelve Union Metal Columns, Design 240, Modern Doric, 12″ Base Diameter, 10″ Top Diameter and 8′ High



Union Metal Pergola in garden of S. A. Gerrard, Avondale, Cincinnati, Ohio
*W. A. Natorp Co., Cincinnati, Landscape Gardeners and Engineers.*
This statement from the Landscape Architects for this pergola will be of particular interest to anyone contemplating the purchase and installation of a pergola —"Our great trouble in using the wooden posts in the past has been, that when we had really achieved the beautiful effects of flowering vines and roses, the wood posts started to decay at the base, which necessitated partially destroying the vines in order to repair these posts. This condition has been entirely eliminated with the Union Metal Columns. The pergola and other garden features are now clothed in beauty to last indefinitely."



Pergola and Garden of A. W. Williamson
*Frank L. Meline, Los Angeles, Architect*

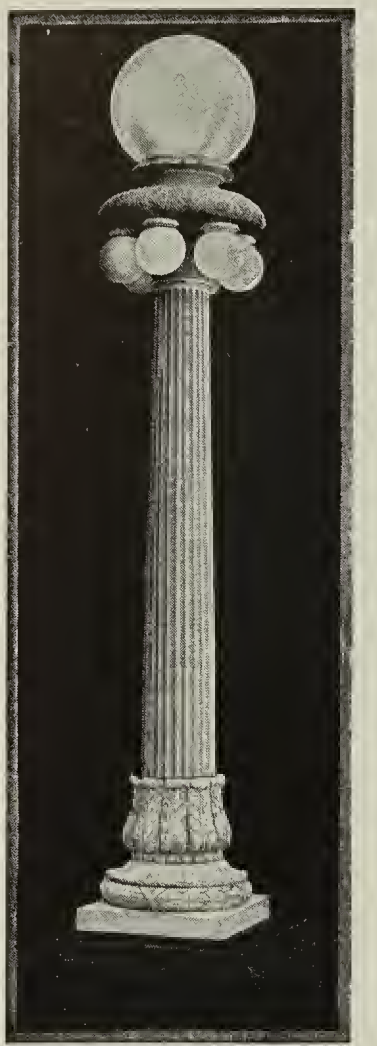
## UNION METAL GARDEN FIXTURES

### Sun Dials, Bird Baths, Drinking Fountains, Flower Bowls and Exterior Lighting Units

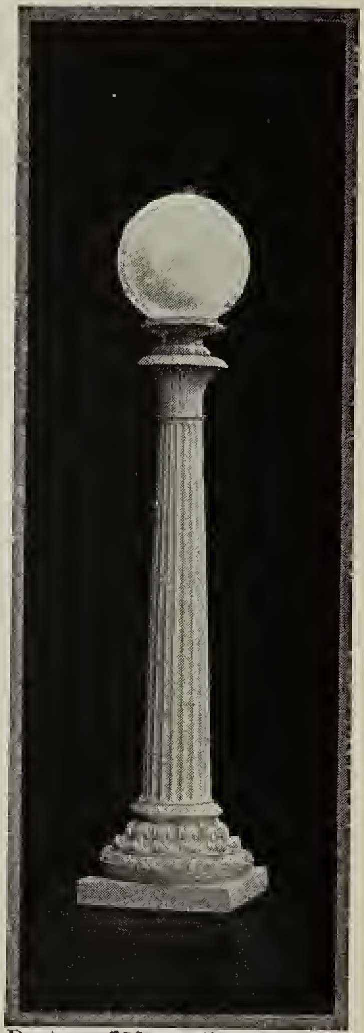
Many grounds lend themselves to still further decoration by the tasteful use of garden fixtures. Even the least pretentious garden should have its sun dial, and in the larger ones Lighting Standards, Flower Bowls, Bird Baths and Drinking Fountains can be placed here and there in a way to add interest and charm to the grounds.

The development of the formal garden, with its pools and its various features of lighting and decoration, is one of the most pleasing tendencies in American landscape architecture.

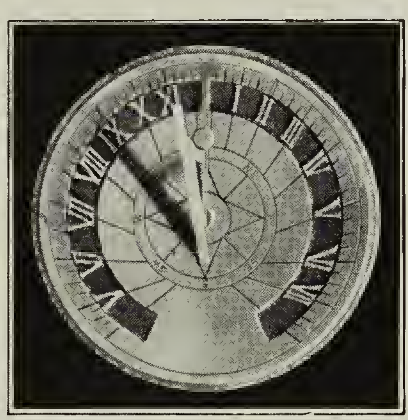
We are the pioneers and exclusive manufacturers of pressed metal lamp standards and of pressed metal columns, and through co-operation with leading members of the architectural profession, we have developed hundreds of designs some of which are shown on the following pages.



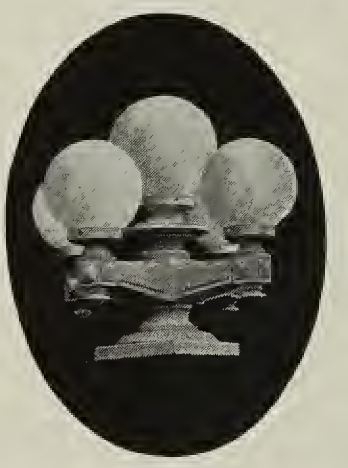
**Design 735**—7 lights. Base 18″ square. Top globe 18″ diameter, bottom globes 6″ diameter. Standard height overall, 9′-0″.



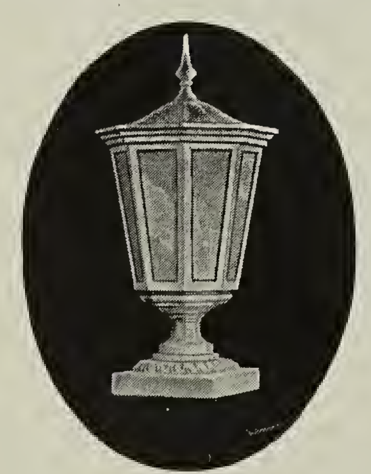
**Design 723**—1 light. Base 18″ square, globe 16″ diameter, standard height overall 6′ 9″.



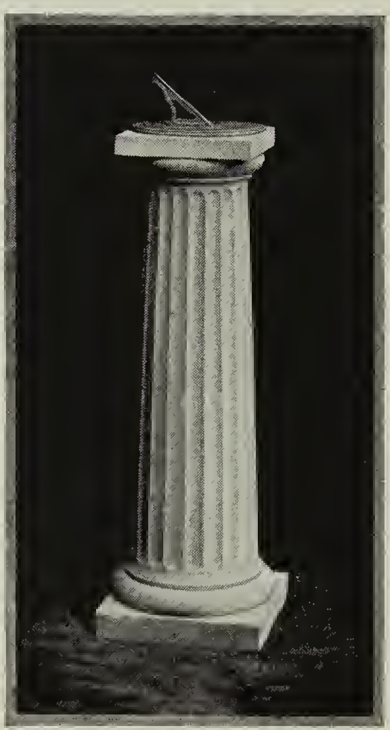
View of Cast Bronze Sun Dial supplied with Designs 833, 834 and 1600. Diameter 10″. Each sundial is designed for latitude in which it will be used.



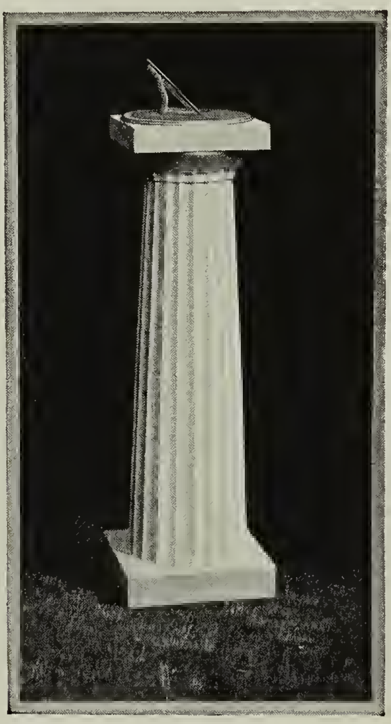
**Design 823**—3 lights. **Design 696**—5 lights. Base 11″ square. 12″ top globe, 10″ side globes.



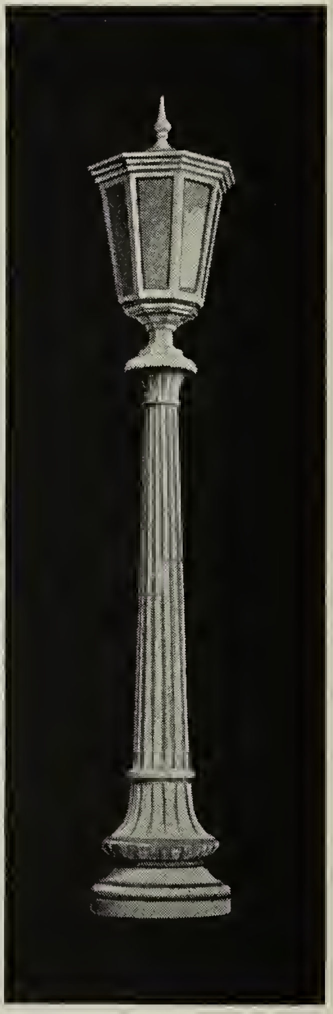
**Design 864**—Lantern Newel Base 11″ square. Height overall 36″.



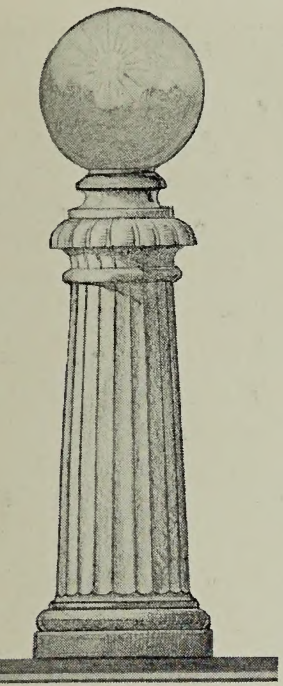
Union Metal Sun Dial Pedestal Design No. 833, Plain Doric, base 13¼″ square, top 11″, bottom diameter 10″, top 8″, height overall 3′ 3″.



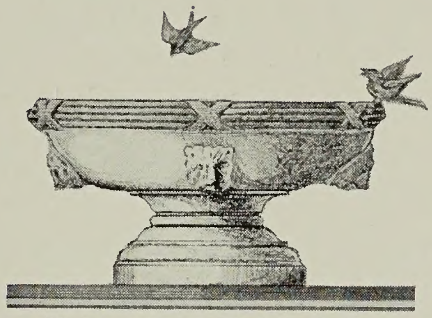
Union Metal Sun Dial Pedestal Design No. 834, Greek Doric, base 12⅜″ square, top 10⅞″, bottom shaft diameter 10″, top 7½″, height overall 3′ 2″.



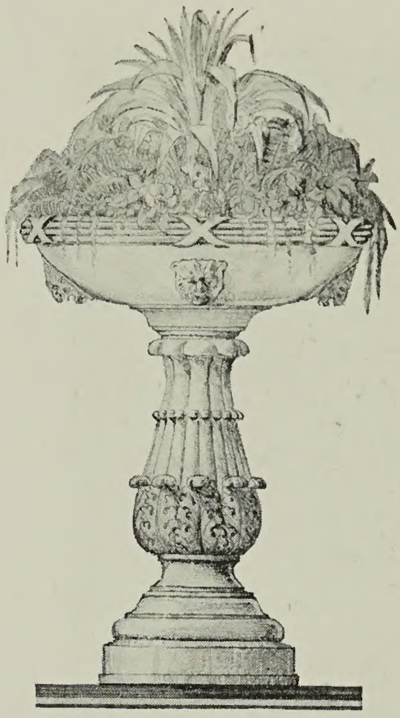
**Design 1220**—Lantern standard base diameter ground line 17″, height overall 8′ 3″.



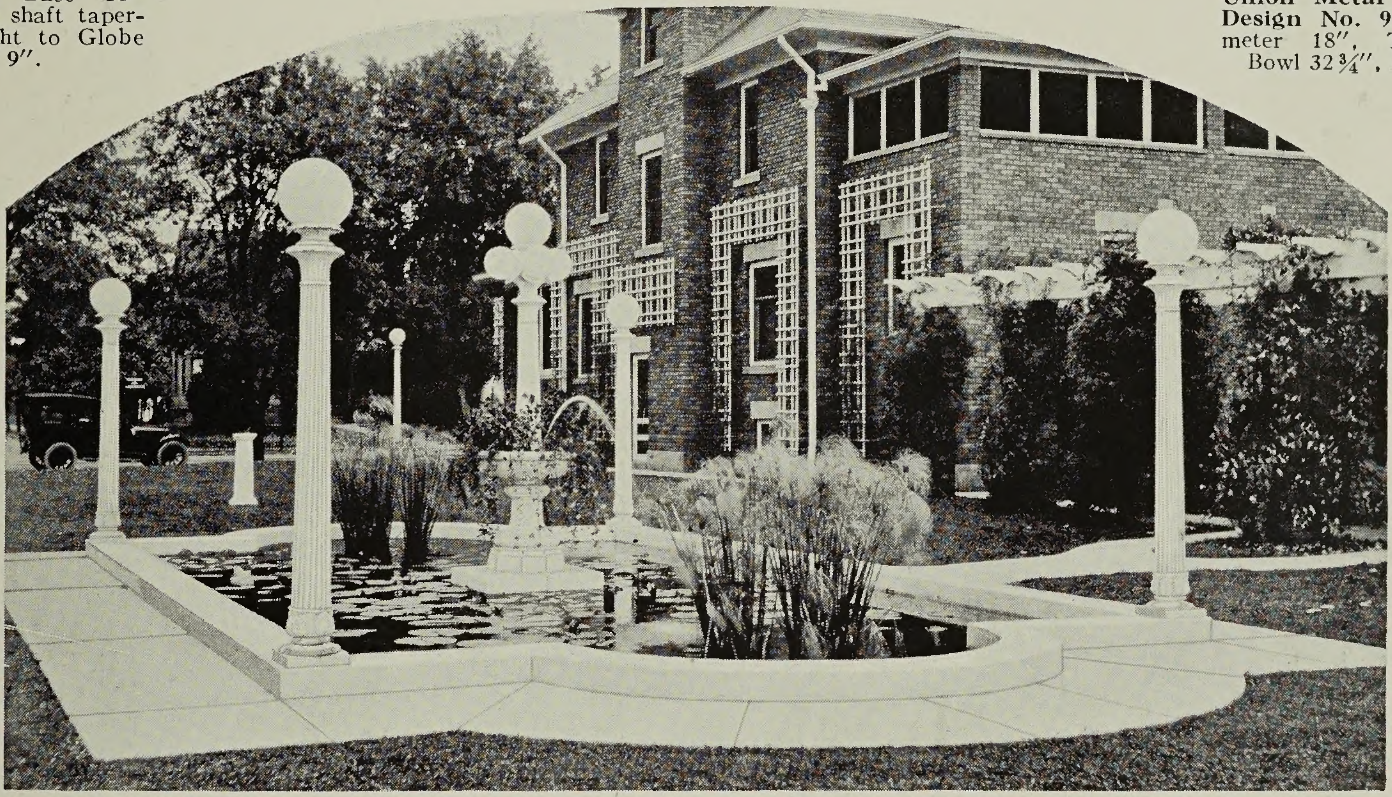
**Gazing Globe Pedestal Design No. 1598**—Base 16″ square, 12″ Steel shaft tapering to 10″. Height to Globe Holder 3′ 9″.



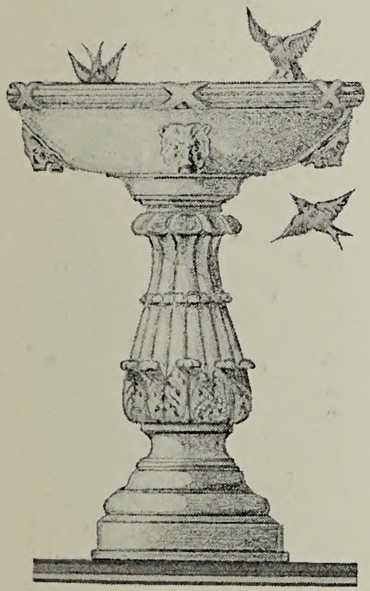
**Union Metal Bird Bath Design No. 978.** Base Diameter 17″, Top Diameter of Bowl 32¾″, Height 16¾″.



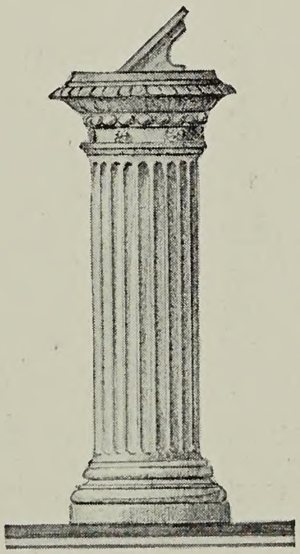
**Union Metal Flower Bowl Design No. 971,** Base Diameter 18″, Top Diameter Bowl 32¾″, Height 3′ 8″.



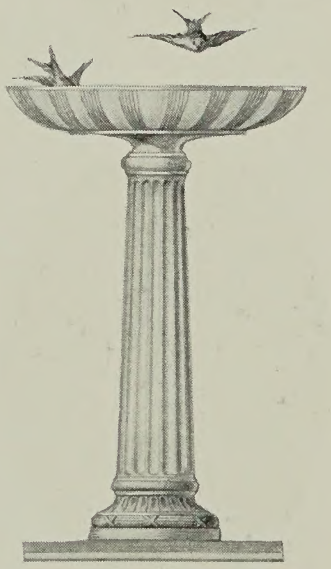
A Garden with a Union Metal Pergola, Sundial, and Union Metal Lamp Standards around the Lily Pond



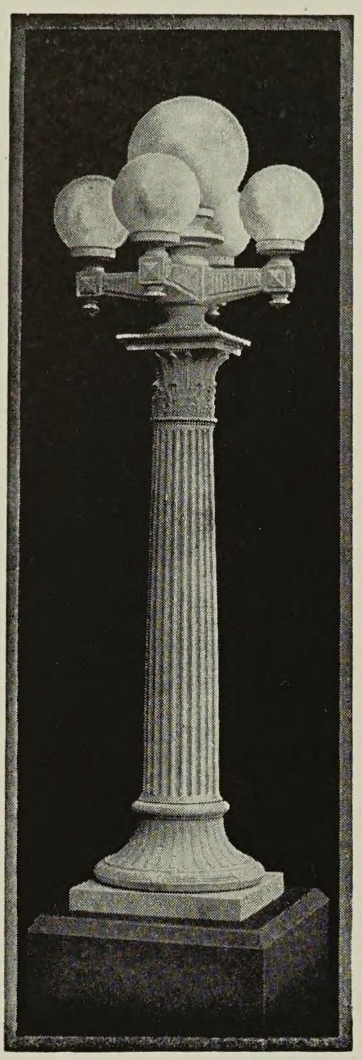
**Union Metal Bird Bath Design No. 1602.** Base diameter 18″, top diameter of bowl 32¾″, height 3′ 8″.



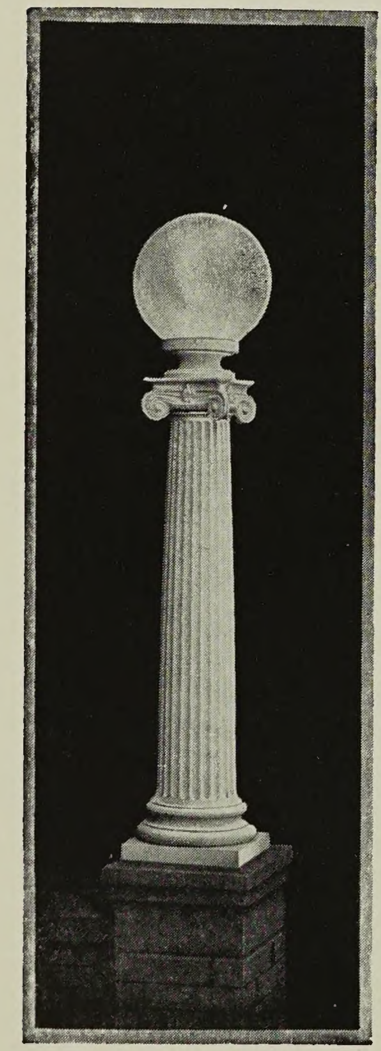
**Union Metal Sundial Pedestal Design No. 1600,** Base 14″ square, Shaft 10″ Diameter Bottom and Top, Height 3′ 4″.



**Bird Bath, Design No. 2707.** Base diameter 9″, top diameter of bowl 21″, height 32¼″.



**Design 838**—3 Lights
**Design 749**—5 Lights



**Design 721**—9½″ Shaft
**Design 837**—7″ Shaft

# Union Metal Exterior Lighting Units

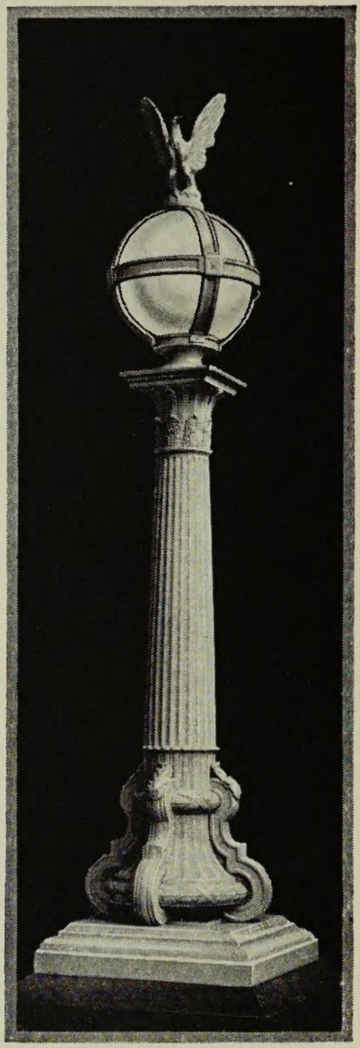
EXTERIOR lighting fixtures are used extensively to light and decorate entrances to churches, schools, libraries, office buildings, apartments, garages, and all types of public buildings.

They are popular for bridge lighting, for installation around gasoline filling stations, and for the lighting of private grounds, parks and estates.

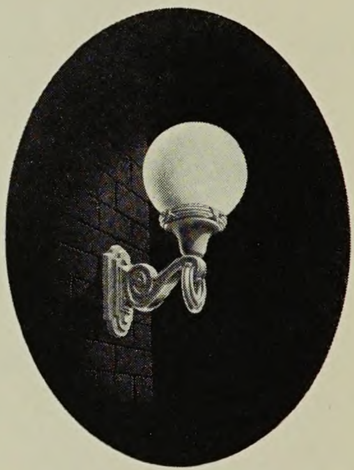
Entrance standard and bracket lighting has become so popular and necessary that on new buildings provision is usually made in the architect's specifications for this material. We are also supplying a heavy demand from buildings of all kinds already erected that feel an increasing need for better lighting effects.

The Union Metal Manufacturing Company was the pioneer manufacturer of ornamental lighting standards and is today the largest producer and distributor of this class of material in the world.

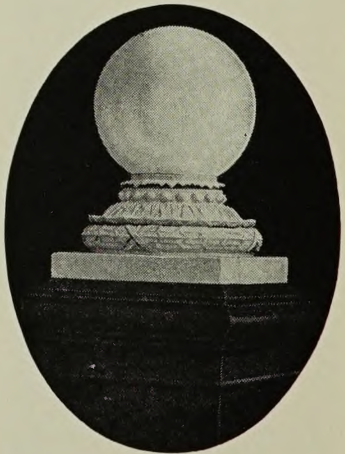
Accompanying photographs represent a few of the many beautiful designs listed in our complete catalog of Union Metal Exterior Lighting Fixtures. Your copy will be sent upon request.



**Design 1174**



**Design No. 1248**—1 light, 10″ Globe. Wall plate 4″ x 9″.



**Design 766**
16″ globe
Base member 18″ square.

AVERY CLASSICS

## Patents and Trade Marks

UNION Metal Lamp Standards, Union Metal Columns, and the machines and dies used in their manufacture are covered by numerous patents and pending applications, all of which are owned by The Union Metal Manufacturing Company, Canton, Ohio, U. S. A.

Trade Mark "Union" in various forms and applications is registered in the United States, Canada, and many foreign countries. Any infringements will be promptly and vigorously prosecuted.

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METAL

FLUTED STEEL PRODUCTS